

Rochester Institute of Technology

**RIT Digital Institutional Repository**

---

Theses

---

2-13-2015

## **Matural Exams in Kosovo: An Analysis on 2014 Test Results**

Genta Agaj

Follow this and additional works at: <https://repository.rit.edu/theses>

---

### **Recommended Citation**

Agaj, Genta, "Matural Exams in Kosovo: An Analysis on 2014 Test Results" (2015). Thesis. Rochester Institute of Technology. Accessed from

This Senior Project is brought to you for free and open access by the RIT Libraries. For more information, please contact [repository@rit.edu](mailto:repository@rit.edu).

A·U·K

Submitted to A.U.K. as part of requirement for graduation

Keywords:

Matura, Exam

Kosovo

Analysis

Tests

2014

# Matura Exams in Kosovo: An Analysis on 2014 Test Results

An Honors Society Project

Presented to

The Academic Faculty

By

Genta Agaj

In Partial Fulfillment

of the Requirements for Membership in the

Honors Society of the American University in Kosovo

## **Acknowledgements**

I would like to express gratitude to all those that have helped me during the time I've been working on this research project. I initially want to thank Dr. Brian Bowen for his continuous support and feedback throughout the semester.

I also want to thank Mrika Kotorri, my advisor, for her constructive advice and contribution in this project, especially for helping on the regression equation. In addition, I want to thank David Wetzel for introducing me to Analysis of Variance Test.

Additionally, I extend appreciation to Prishtina's Municipal Education Directorate who were kind enough to provide the data and Lert Doko and Gresa Agaj who were kind enough to help me with the database.

A special thank you also goes to my friends from the A.U.K. Honor Society for their continuous feedback and to my family for their continuous support throughout my entire education.

## Table of Contents

Acknowledgements.....	2
Executive Summary.....	5
Chapter 1: An Overview of Standardized Testing.....	6
Background Information.....	6
High Stakes vs. Low Stakes.....	6
The Benefits and Criticisms of Standardized Achievement Tests.....	7
The Benefits and Criticisms of Standardized Aptitude Tests.....	9
Chapter 2: An overview of Education System and Standardized Tests in Kosovo.....	12
Education System in Kosovo and its Challenges.....	12
Standardized Tests in Kosovo.....	13
An Overview of Prishtina’s High Schools.....	14
General Education in Prishtina’s High Schools.....	16
Professional Education in Prishtina’s High Schools.....	18
Chapter 3: Methodology.....	22
Chapter 4: Normality check.....	25
Normality Check: The Results.....	26
Normality Check: Analysis and Discussion.....	29
Chapter 5: Analysis of the Variance (ANOVA).....	33
ANOVA: The Results for General Section of the Test.....	33
ANOVA: The Analysis and Discussion for the General Section of the Test.....	34
ANOVA: The Results for Albanian.....	36
ANOVA: The Analysis and Discussion for Albanian.....	37
ANOVA: The Results for English.....	39
ANOVA: The Analysis and Discussion for English.....	40
ANOVA: The Results for Math.....	42
ANOVA: The Analysis and Discussion for Math.....	42
Chapter 6: The Regression Equation.....	45
The Regression Equation: The Results.....	45
Description of the Variables.....	46
The Regression Equation: Analysis and Discussion.....	47
Chapter 7: Recommendations and Conclusion.....	49

Further Research Recommendations .....	49
Policy Recommendations.....	49
Conclusion.....	51
Work Cited.....	52
Appendix 1: Student Scores .....	0

## Table of Figures

Figure 2.1 Number of Total Students Vs. Students Who Passed the Matura Exam in June ..... **Error! Bookmark not defined.**

Figure 2.2 Number of Total Students vs. Students Who Passed the Matura Exam in August ..... **Error! Bookmark not defined.**

Figure 2.3 Passing Rates in General Education Schools - June 2014 ..... **Error! Bookmark not defined.**

Figure 2.4 Passing Rates in General Education Schools - August 2014.. **Error! Bookmark not defined.**

Figure 2.5 Passing Rates in Professional Schools - June 2014 ..... **Error! Bookmark not defined.**

Figure 2.6 Passing Rates in Professional Schools - August 2014..... **Error! Bookmark not defined.**

Figure 4.1 Distribution of Verbal Scores of the GRE test ..... **Error! Bookmark not defined.**

Figure 4.2 Normal Distribution of Total Points ..... **Error! Bookmark not defined.**

Figure 4.3 Normal Distribution of Total Points (without outliers)..... **Error! Bookmark not defined.**

Figure 4.4 Normal Distribution of the scores in the Albanian section with and without outliers **Error! Bookmark not defined.**

Figure 4.5 Normal Distribution of the scores in the English section with and without outliers... **Error! Bookmark not defined.**

Figure 4.6 Normal Distribution of the scores in the Albanian section with and without outliers **Error! Bookmark not defined.**

Figure 4.7 Your GRE Score..... **Error! Bookmark not defined.**

Figure 4.8 GRE Results Table..... **Error! Bookmark not defined.**

Figure 5.1 ANOVA Test on Total Scores ..... **Error! Bookmark not defined.**

Figure 5.2 Tukey Test on Total Scores..... **Error! Bookmark not defined.**

Figure 5.3 ANOVA Test on the Albanian Section Scores..... **Error! Bookmark not defined.**

Figure 5.4 Tukey Test on Albanian ..... **Error! Bookmark not defined.**

Figure 5.5 ANOVA Test on the English Section Scores..... **Error! Bookmark not defined.**

Figure 5.6 Tukey Test on Albanian .....	<b>Error! Bookmark not defined.</b>
Figure 5.7 ANOVA Test on the Math Section Scores .....	<b>Error! Bookmark not defined.</b>
Figure 5.8 Tukey Test on Math .....	<b>Error! Bookmark not defined.</b>
Figure 6.1. Regression Analysis for Total Scores.....	<b>Error! Bookmark not defined.</b>

## **Executive Summary**

The focus of this research project was to address some of the criticisms associated with Kosovo’s standardized tests - Matura Exams. The main goal of the project was to statistically analyze students’ test results using three statistical techniques. This problem was tackled by obtaining the 2014 results for the Municipality of Prishtina.

*First*, Prishtina’s Matura Exam test results were checked for normality. The results from this test suggested that even though Matura Exam is supposed to have normally-distributed results, it failed to do so. Its implications include students and universities not being able to compare individual results with the population results. Thus, it was recommended for MEST to differently structure the test and/or to test experimental questions to students beforehand. *Second*, the test results were used to perform the Analysis of Variance (ANOVA) Test. The main revelation from ANOVA was that schools have performed statistically different from each other. In addition, the best-performing schools and the worst-performing schools were able to be identified. Such a statistic was recommended to be used to identify and then tackle the subjects in which the schools are not performing well. *Third*, a Regression Equation was constructed in order to determine which variables affect students’ scores in the Matura Exam. It was found that variable “school,” “private versus public education,” and “gender” are statistically significant in explaining test results. The recommendation for this section was to further expand this equation so the independent variables could explain more of the variation in the test scores.

The main aim of this project was to provide with some concrete statistical tests that institutions such as the Ministry of Education, Science, and Technology along with the Municipality Education Department could undertake and possibly publish.





# **Chapter 1: An Overview of Standardized Testing**

## **Background Information**

The focus of this research project was to analyze students' scores in the Matura Exam, which is a standardized exam held in Kosovo after students finish their high school. The goal of the project was to test whether the exam results followed a normal distribution curve, which is a property of standardized tests, to statistically see if there are any disparities between schools, and to determine which variables determine students' test results.

A standardized test is defined as any test that is "administered and scored in a predetermined, standard manner" (Popham, 1999). According to Times Magazine, they "have become one of the largest determining factors in the college-admissions process" (Fletcher, 2009).

Standardized tests initially started in China (Popham, 2001). While the Western world still favored essays and oral examinations, China found an efficient way to determine whether those interested in working as civil servants met the standards to do so. Eventually, the standardized testing emerged and caught on during the Industrial Revolution as a quick and easy way to test students. However, the United States did not introduce standardized testing until World War I. It was when a large number of people enlisted for the army that the United States had to use standardized testing for placements in the army (Popham, 2001). Shortly after the army's use of standardized tests, these tests started to be used in education. Soon, the Educational Testing Service (ETS) was established and its mission became to provide "fair and valid assessments, research, and related services to help individuals, parents, teachers, educational institutions, businesses, governments, countries, states, and school districts" (Educational Testing Service, 2014). The most famous standardized tests nowadays are the SATs (Scholastic Aptitude Test) and the ACTs (American College Testing); surprisingly, none of their initials stand for their original meanings (Rideau, 2009). The next section deals with two types of standardized tests based on the consequences they carry for the test takers: high stakes and low stakes tests.

## **High Stakes vs. Low Stakes**

Countries in the world have created different educational systems as well as different assessment techniques. United States and England, for example, hold educators responsible for the

standardized test scores of their students. Japan, on the other hand, doesn't hold educators responsible for the standardized test scores of their students. Alternatively, Germany does not rely on standardized testing as some states do; instead, it monitors students' progress from grade five (5) (Rotberg, 2006).

In addition, the importance of the standardized tests in determining student's placement varies in different countries. For example, there is a common misperception that U.S. bases its education system in tests immensely. However, while the U.S. does test its students considerably, the stakes per exam around the world are much higher than in the U.S. For instance, in England, every sixteen-year-old is expected to undergo 15 to 20 examinations that determine whether the student will get to graduate from high school (Turner, 2014). On the other hand, Finland has one examination in the end of high school which is composed of half-day long exams for 6 days. The stakes are high for Finish students whose future may be very difficult to fulfill in case they do poorly in this exam. Thus, while the U.S. is testing its teens very frequently, the stakes of those tests in the U.S. are much lower compared to those in other states (Turner, 2014).

The standardized tests are divided into two categories: *achievement tests* and *aptitude tests*. While achievement tests are used to determine student's and school's success in obtaining the required level of knowledge, aptitude tests measure student's likeliness to perform on a consequent education. According to Popham (1999), one of the main advantages of standardized tests is the ability to infer students' strengths and weaknesses across subjects as well as the ability to monitor student's growth over time. Because most of the testing and evaluation is done by machines, standardized tests are able to test a lot of students at the same time and its costs are relatively low. This means that they have evolved to be one of the most efficient ways of testing.

## **The Benefits and Criticisms of Standardized Achievement Tests**

This section represents a short summary of the main strengths and weaknesses of standardized achievement tests.

There are many proponents and many opponents of standardized testing. First, if properly constructed, the content of the standardized achievement tests matches up with the school curricula. This way these tests measure what the students ought to know. Second, standardized tests serve as a comparison method across groups. This means that they measure the student's

achievement by comparing it to other students, usually the norm group. Third, standardized tests are usually well-designed. That is because test companies and local educators form unbiased and appropriate tests by following the states' standards. Fourth, the "reporting of standardized tests is done responsibly." The use of computers instead of humans to score these tests has made the scoring process very well-organized. Finally, administrative costs for standardized testing are relatively low. Comparing to performance formats or other assessment methods, standardized tests are cheaper (Rideau, 2009).

Another proponent of standardized testing is Richard Phelps, who in his book "The War on Standardized Testing: Kill the Messenger," focuses on four elements such as organizational clarity, motivation, information, and goodwill from which the standardized achievement tests benefit from (as cited in Rideau, 2009). For example, in terms of **organizational clarity**, Phelps argues that teachers who participate in developing state standards can better align their objectives in the classroom with the state standards. This way, these teachers will know how to prepare their students to have better results. In terms of **motivation**, Phelps argues that because in the United States students, teachers, and districts are held accountable for students' results, they are more motivated to succeed. Thus, motivation as a factor drives them into having better scores. Further, **information** from the tests can be used to diagnose students' strengths and weaknesses as well as to evaluate the curriculum and the instructional strategies. Both students and schools can now know where they stand and where they need to improve. Lastly, in terms of **goodwill**, Phelps states that because the results are published and accessible and the schools are being held accountable, the public renews their confidence in schools.

However, there are also many limitations to standardized testing. First, the opponents of standardized achievement testing cite "the generalized nature of curriculum on these tests" as a negative factor about these tests. This means that because the test reflects a generic curriculum, schools with unique curricula are more likely to perform poorly. Rideau states this idea as "a mismatch between testing and teaching" (2009). Second, because the distribution of the test scores is supposed to be normal, the test makers will throw out the test questions that students tend to answer correctly most of the time on the pilot test. This leads to a question. How can we hold teachers accountable if we are deliberately removing the questions about the concepts they've successfully taught in the classroom? Third, the nature of the comparisons that are made

between states and districts can be considered as unfair. While the schools are not treated equally fund-wise, with the wealthy schools being funded up to four times more than the poor schools, it is not fair for them to be treated equally test-wise. Thus, the children who have been raised in poor conditions, at school and at home, and have been deprived of many of the advantages such as basic needs, parental support or life experiences are treated the same as those who have been raised in good conditions. Fourth, the multiple-choice nature of the tests “[does] not coincide with the instruction of higher level thinking skills, and problem solving skills which are considered to be best practices in education” (Rideau, 2009). These multiple-choice questions have reduced the importance of active skills such as writing, acting, speaking or drawing. Last, Rideau states that holding teachers and schools accountable, incentivizes them to “narrow the curriculum to fit the test,” cheat, or engage in other negative practical impacts. Some teachers do not even go back to teaching in schools with lower scores (2009).

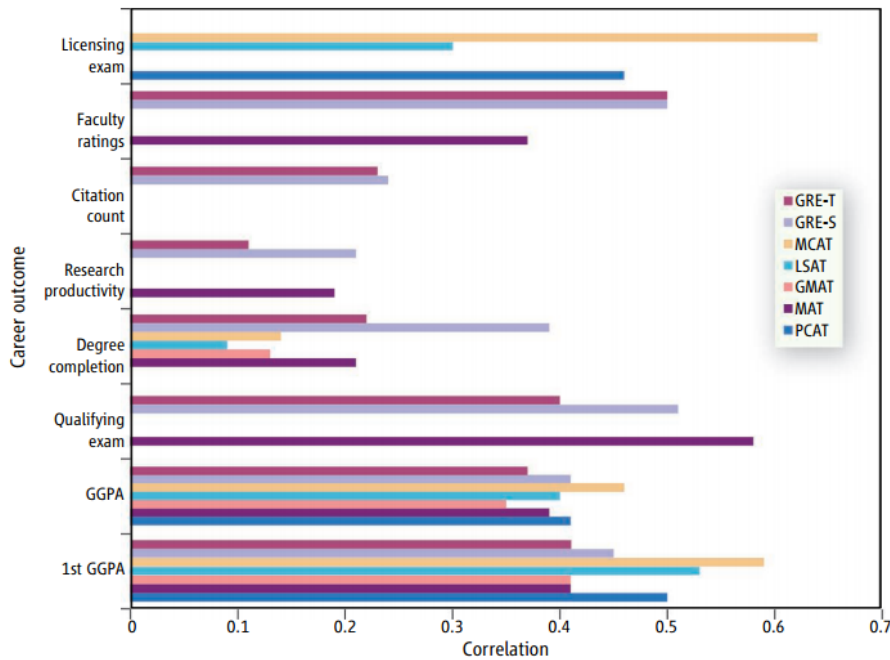
### **The Benefits and Criticisms of Standardized Aptitude Tests**

The focus of this section is to present some of the benefits and criticisms that most researchers have pointed out for the Standardized Aptitude Tests.

The most used form of the Standardized Aptitude Tests in the United States is the SAT. The SAT is designed to predict college performance. In a statistical test done in 2000, SAT was better related with the freshman college performance of different ethnicities in the States than the high school grade point average (McDonald et al., 2000).

In addition to SAT, Kuncel et al. conducted a study on whether the Standardized Tests are able to Predict Graduate Students’ Success. What this study found can be summarized in the graph below. The graph presents how much the scores of a particular standardized test correlate with student’s success. The outcome of this study, as seen in Figure 1.1, was that “standardized admission tests provide useful information for predicting subsequent student performance across many disciplines” (Kucnel et al., 2007).

**Figure 1.1** Correlation of student’s test scores with the student’s success in graduate school



**Tests as predictors.** Standardized test scores correlate with student success in graduate school. See table S1 for detailed data.

**Source:** “Standardized Tests are able to Predict Graduate Students’ Success”

The criticisms of the standardized aptitude tests are the following. First, they are poor predictors of individual student performances. While standardized tests have been successful in determining the performance of groups, they have failed to do so for individuals. Second, they restrict and influence what is being taught. Because there is a mismatch between the tests and the curricula that the schools or the teachers use, these tests tend to influence teachers to “teach the test” instead. Third, the standardized aptitude tests cause damage by the way they label and categorize students. The success of a student is usually measured in relative to the other students. That is done through percentiles, meaning that a student in the 80<sup>th</sup> percentile has scored more than 80% of the students. The criticism behind this system lays in the fact that one question, which is not enough, might make a difference. Fourth, the standardized tests are considered socially, culturally and racially biased. Most tests favor socially and economically advantaged students which lead to unequal opportunities for the challenged groups in further education and/or employment. Lastly, just like the assessment tests, the standardized aptitude tests measure

limited student knowledge. Luckily, the tests are improving; they now measure students' ability to compare, analyze, synthesize, and evaluate concepts (Warthen et al., 1991).

## **Chapter 2: An overview of Education System and Standardized Tests in Kosovo**

### **Education System in Kosovo and its Challenges**

The education system in Kosovo is comprised of the following levels:

- Preschool Education begins with 3-year-old children. It is optional for all children.
- Primary Education begins with 6-year-old children. It is obligatory for all children and consists of grades 1-5.
- Lower Secondary Education is also obligatory for all students, usually aged 12-15, and consists of grades 5-9.
- Higher Secondary Education lasts 3 to 4 years and is divided into the general and professional education.
- Higher Education lasts 3 to 4 years and is attained in the multiple universities in Kosovo.

The “Situational Analysis of Education in Kosovo” prepared by UNICEF (2004) is a document that shows some of the achievements and challenges that characterize the Kosovo education system. The UNICEF (2004) report states the following achievements in terms of the primary and lower secondary education. First, the report states that the school entry age to 6 years of age as opposed to 7 years of age has allowed for international comparisons. Second, the 5-4-3 (5 years primary school, 4 years lower secondary school, and 3 years upper secondary school) system was implemented in order to be compliant with most EU states. Third, programs that reduce dropout rates along with programs that integrate diaspora children have been implemented. However, the challenges that remain for the first nine years of education are the enrollment of students from non-Albanian communities, reintegration of returnees, and the large distance of some schools from students’ homes (Wenderoth, 2004).

In terms of upper secondary education, the report states a number of challenges. For example, the shift of the system from 4-4-4 (4 years primary school, 4 years lower secondary school, and 4 years upper secondary school) to 5-4-3 where the first nine years of education, instead of eight, are obtained in the same school has led to less years of high school. That has subsequently harmed some of the high school teachers as well as the students. Because only primary education has been reformed, the concern is that there might be a “quality gap” between primary and

secondary education. That is because students will go from a reformed education system to a non-reformed education system, which will probably cause inconsistencies in what they are learning and hence confusion. Another challenge is the highly academic, teacher-centered approach instead of student-centered approach that is still dominant in secondary level. Lastly, the dropout rates for the secondary school level seem even more severe, especially among girls and minorities (Wenderoth, 2004).

### **Standardized Tests in Kosovo**

According to the Law on Education, all students must take standardized examinations at least twice during their educational years. The first standardized test is held at the end of the Lower Secondary Education period (i.e. after 9 years of schooling). This test, which is usually held in June, is a standardized achievement exam which covers several areas of study including: Albanian and English Languages, Math, History, Biology, Geography, Physics, Chemistry and IT. The score of this exam in combination with the grades that the students have earned in their 9 years of schooling determine their suitability for different schools. The higher-ranking students usually enter general education high schools, whilst the lower-ranked ones enroll into professional schools. Finally, the students who do not pass the 50% bar for the exam are entitled to re-examination, which is usually held in the end of August, and through which (if they pass) they can attempt to enroll in higher learning.

The second standardized test, which is called the State Matura Exam “is the standardized final exam, monitored and assessed. Successful completion of the Matura Exam is the prerequisite for completion of the upper secondary school level. Additionally, it is used as a proof “of the level of knowledge of the candidate for work and continuing the tertiary education in harmony with corresponding enrolment procedures” (The Law on Final Exam and State Matura Exam, 2008). From the pupil’s point of view, this test has two purposes. Firstly, it determines who is eligible to pursue higher education, meaning that those who score less than 50% are not eligible to enroll to universities. Secondly, the score of the test serves as an admission criterion in some universities. In most cases the test score in conjunction with the grade point average that the students have received in their education are weighted according to the admission guidelines of the specific institution, in order to determine the students’ eligibility for acceptance. It is important to note



that the law states that the grade point average earned in secondary school must be included in any admissions criteria.

According to “The Law on Final Exam and State Matura Exam,” the Matura Exam consists of two sections with 120 and 80 points each. The first section, which is uniform for all schools, is composed of the general subjects: Albanian, Mathematics, and English. The second section, which differs from school to school, is composed of special subjects depending on high school concentration. The threshold for passing the Matura Exam is 50%. Those who pass the threshold are eligible to continue further studies while those who do not pass the threshold are subject to repeating the test. This law does not specifically cite whether the State Matura is an achievement or an aptitude test, leaving the reader imply about the nature of the test. The composition of the test where half of it is tailored based on the school’s concentration makes the reader think that this is an achievement test; however, the fact that this test is used for applying to university hints that it may be an aptitude test. A better definition used in the law, or an explicit statement on what this test is about, would be helpful.

### **An Overview of Prishtina’s High Schools**

The focus of this research project is on the State Matura test scores in Prishtina. Prishtina has the largest number of schools and students in Kosovo. Out of the 140 national high schools, including private schools, 17 are located in Prishtina. The Table below presents the statistics for Prishtina:

**Table 2.1** Prishtina Education Statistics as a Ratio to Kosovo Education Statistics

	Number of High Schools	Number of Teachers	Number of Students
Prishtina <sup>1</sup>	17	774	13674
Kosovo	140	6142	107303
Prishtina as a % to Kosovo	12.14%	12.60%	12.74%

**Source:** “Education Statistics 2012-2013”

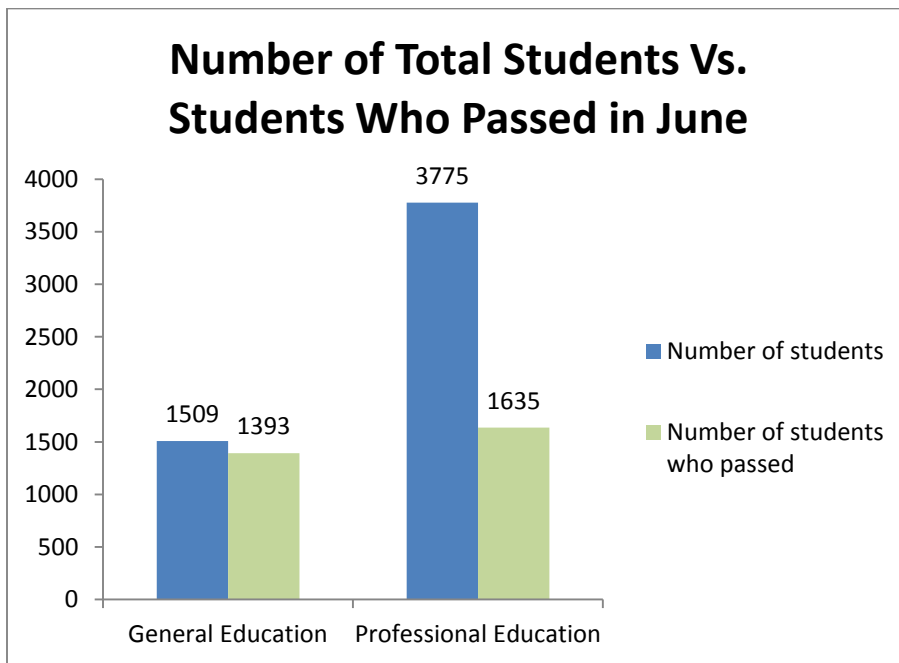
---

<sup>1</sup> The numbers for Prishtina include the private high schools as well even though later the paper focuses only on the private schools.

After removing the data from the private high schools and focusing solely on public schools, as recorded on June 2014, there are a total of 5,284 Prishtina high school students who underwent Matura Exam.

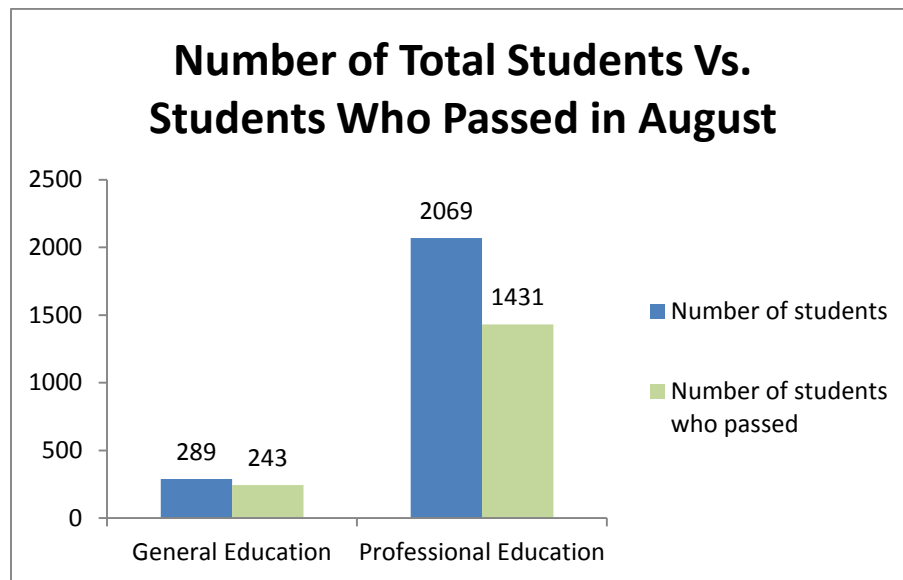
There are twelve public high schools in Prishtina., three that offer a general education program and nine that offer professional and mixed education programs. As of 2014, according to the Municipal Education Directorate (MED) of Prishtina, out of the total students of the public schools who took the Matura Exam, 29% (or 1509 seniors) were enrolled on general education schools, while the other 71% (or 3775 students) were enrolled in professional schools. The figure 2.1 illustrates the difference between the number of students who took the exam against the number of students who passed it. Additionally, it shows how these rates differ in General Education programs versus Professional Education programs.

**Figure 2.1** Number of Total Students Vs. Students Who Passed the Matura Exam in June



**Source:** Municipal Education Directorate of Prishtina

**Figure 2.2** Number of Total Students Vs. Students Who Passed the Matura Exam in August



**Source:** Municipal Education Directorate of Prishtina

As it can be seen from the graphs, although considerably fewer students are enrolled in general education, their passing rate is significantly higher (92.3% in June and 84% in August) in comparison to the students of the professional education (43.3% in June and 69.2% in August).

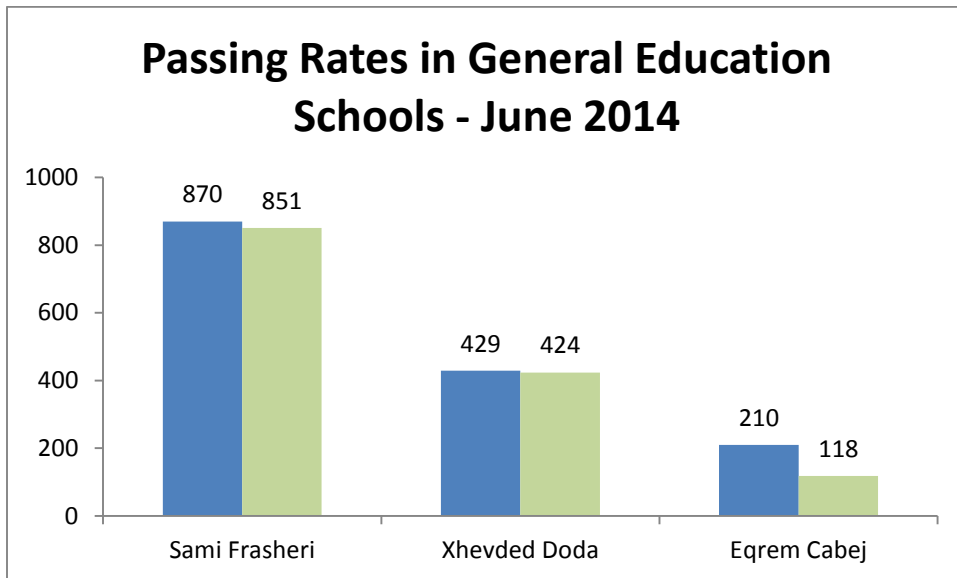
### **General Education in Prishtina's High Schools**

The three high schools that offer general education in Prishtina are the following: Sami Frasheri, Xheveded Doda and Eqrem Qabej. Sami Frasheri offers three concentrations: General Studies, Math and IT, and Social Sciences. In June 2014, 870 students from this school underwent the Matura Exam and 851 of them (or **97.82%**) were able to pass it. In August, out of 102 students that took the test, 89 students (or **87.25%**) were able to pass it.

Xheveded Doda offers one concentration: Natural Sciences. There were a total of 429 students who underwent the Matura Exam in June and another 37 students in August. In the first trial, **98.83%** students passed the Matura Exam, while in the second trial, **59.46%** were able to do so.

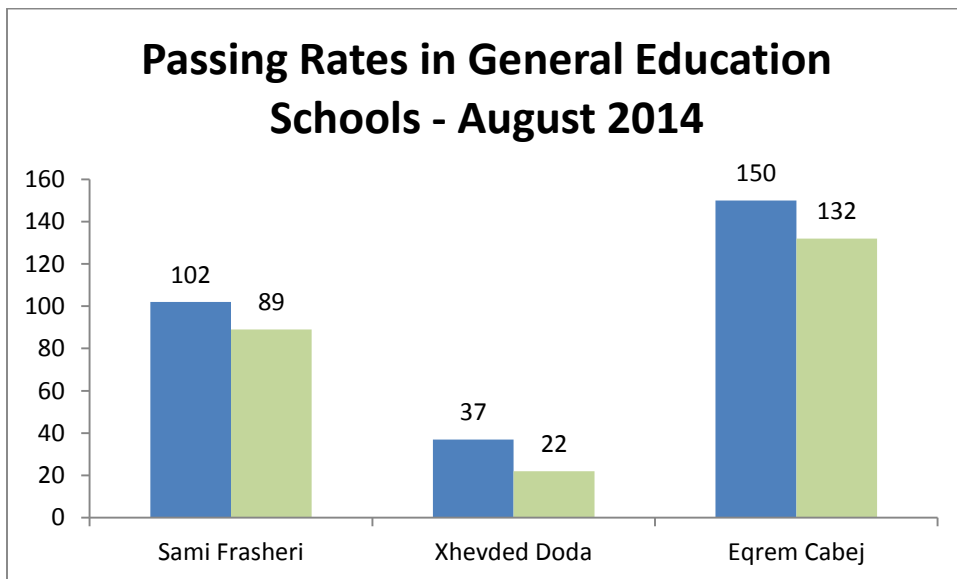
Eqrem Qabej is a linguistics school, focusing on Albanian and English. There were 210 students who took the Matura Exam on June and 150 who took it on August. Their passing rates were **56.19%** and **88%** respectively.

**Figure 2.3** Passing Rates in General Education Schools - June 2014



**Source:** Municipal Education Directorate of Prishtina

**Figure 2.4** Passing Rates in General Education Schools - August 2014



**Source:** Municipal Education Directorate of Prishtina

## **Professional Education in Prishtina's High Schools**

The remaining nine schools in Prishtina offer a professional education. These high schools are: Ali Sokoli, 28 Nentori, Shtjefen Gjecovi, Hoxhe Kadri Prishtina, 7 Shtatori, Abdyl Frasheri, Prenk Jakova, and Gjin Gazulli. Because the individual passing rates for the schools are important for the later stages of the research study, the following information will summarize the passing rates for each of the professional schools.

Ali Sokoli offers high school studies in healthcare and medicine. There were a total of 480 students who underwent the Matura Exam in June and another 42 students in August. In June, **92.08%** of the students passed the Matura Exam, while in August, **52.38%** were able to do so.

28 Nentori offers two concentrations: Geodesy and Construction. Out of the total 825 students who took the exam in June, 218 were able to pass. In addition, out of 671 students who took the exams in August, 414 of them were able to pass. That means that the passing rates were **26.11%** in June and **61.7%** in August.

Shtjefen Gjecovi focuses on Machinery and Metal Construction. There were a total of 420 students from this school who underwent the Matura Exam in June and another 444 students in August. In June, **10%** of the students passed the Matura Exam, while in August, **33.33%** were able to do so.

Hoxhe Kadri Prishtina offers two concentrations: Economics and Law. Out of the total 902 students who took the exam in June, **58.76%** were able to pass. In addition, out of 513 students who took the exams in August, **78.95%** of them were able to pass.

7 Shtatori focuses on Trade, Hospitality and Tourism. There were a total of 97 students from this school who underwent the Matura Exam in June and another 113 students in August. In June, **5.15%** of the students passed the Matura Exam, while in August, **40.71%** were able to do so.

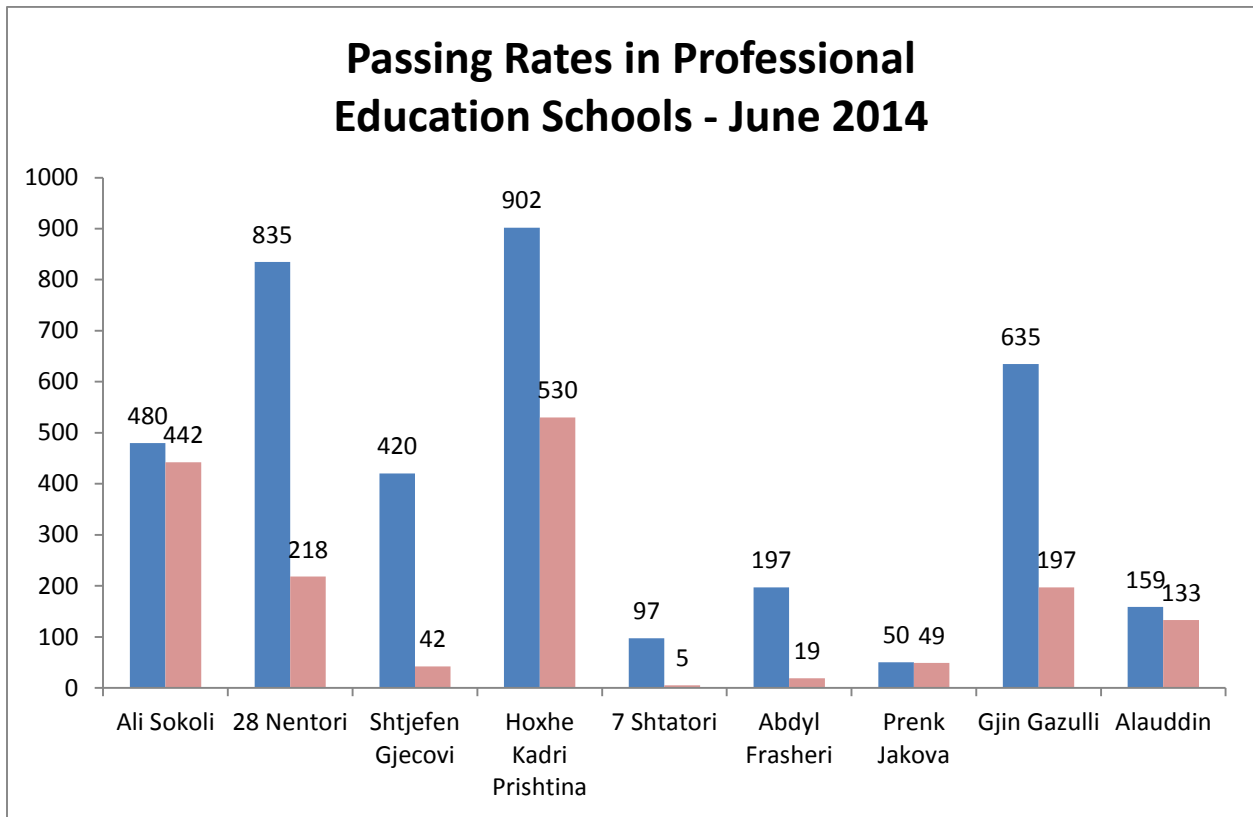
Abdyl Frasheri focuses on Agriculture and Wood Processing. Out of the total 197 students who took the exam in June, **9.64%** were able to pass. In addition, out of 174 students who took the exams in August, **48.85%** of them were able to pass.

Prenk Jakova offers concentrations in Music, Culture and Arts. Out of the total 50 students who took the exam in June, **98%** were able to pass. In addition, out of 5 students who took the exams in August, **80%** of them were able to pass.

Gjin Gazulli focuses on Electro technology with its two concentrations: telecommunications and IT. There were a total of 635 students from this school who underwent the Matura Exam in June and another 550 students in August. In June, **31.02%** of the students passed the Matura Exam, while in August, **52.36%** were able to do so.

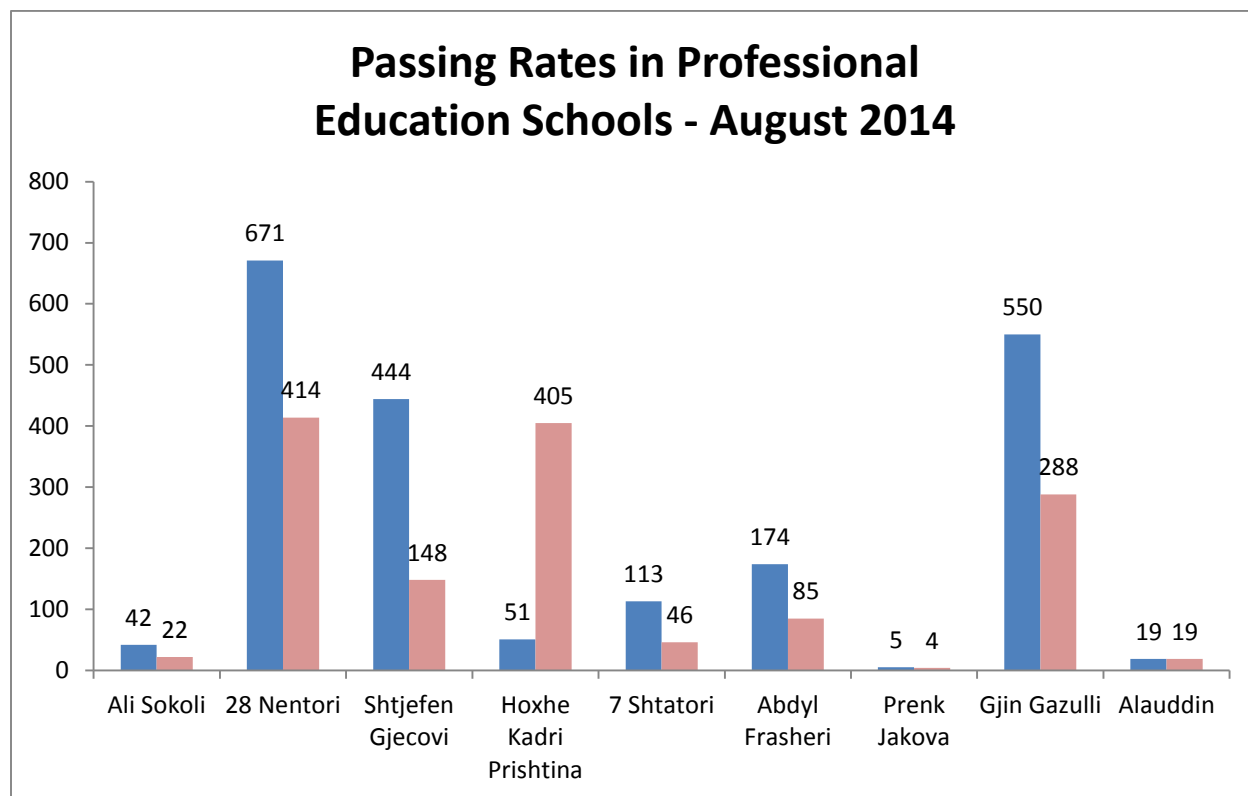
Alauddin is the only religious school in Prishtina. Out of the total 159 students who took the exam in June, **83.65%** were able to pass. In addition, out of 19 students who took the exams in August, **all** of them were able to pass.

**Figure 2.5** Passing Rates in Professional Schools - June 2014



**Source:** Municipal Education Directorate of Prishtina

**Figure 2.6** Passing Rates in Professional Schools - August 2014



**Source:** Municipal Education Directorate of Prishtina



## Chapter 3: Methodology

### Goals

This project will be addressing the issue of disparities in standardized test results between the high schools located in Prishtina. The main goal of the project is to determine statistical differences between high schools by analyzing their Matura Exam results. This way it can be determined which schools seem to perform better and in which subject areas some schools need to improve on. In addition, another goal of this project is to statistically test whether the distribution of the results is bell-curved - a characteristic of standardized tests. Last, but not least, the goal of this project is to create a regression function which would help in determining how much some specific factors have a role on the students' scores in the Matura Exams.

This part of the project includes three sections. First, there is the Normality Check for the Matura Exams, which determines whether the distribution of the points that students receive is a normal distribution. Second, there is the Analysis of Variance test (ANOVA) performed for the schools. ANOVA looks at the differences of the means; thus, checking out whether the mean results of the schools are statistically different. Thirdly, there is the regression equation. The aim of this regression equation is to determine which variables affect students' scores in the Matura Exam.

### Methodology

This project relies on the test scores that students undertake after they finish the high school. As mentioned previously, the main purpose of these tests is to pass the bar, which is 50%, so that the students are eligible to continue their studies. The data that was used in this project includes the June 2014 scores of twelve schools in Prishtina. Although Prishtina has seventeen schools in

total, the data for the twelve schools was all that the Municipal Education Directorate of Prishtina possessed; thus, all that it could be obtained. Consequently, the constraint in terms of randomization is that sample randomization was dictated by the data that was obtained. After the data were gathered, the statistical software Minitab was used to perform the analysis of the data. That means that the statistics were calculated in Minitab while the figures presented in this project are derived from Minitab and from Excel.

### **Difficulties**

The major *difficulty* while doing this project was to obtain the data. Although the responsible authorities should have been supportive of such a project, the biggest challenge was to get these authorities to believe that the intentions behind this project are pure. Because of the reluctance of the authorities to provide the electronic data, hard copy data were used for the final version.

### **Possible Sources of Error**

The fact that the data were manually typed in an Excel spreadsheet creates a *possible source of error*. That means that here is a chance that there are mistakes caused while the data was manually put into the spreadsheet. This source of error is not only due to the one who typed the data in but also due to bad printing which in some cases resulted in missing specific information.

### **Limitations**

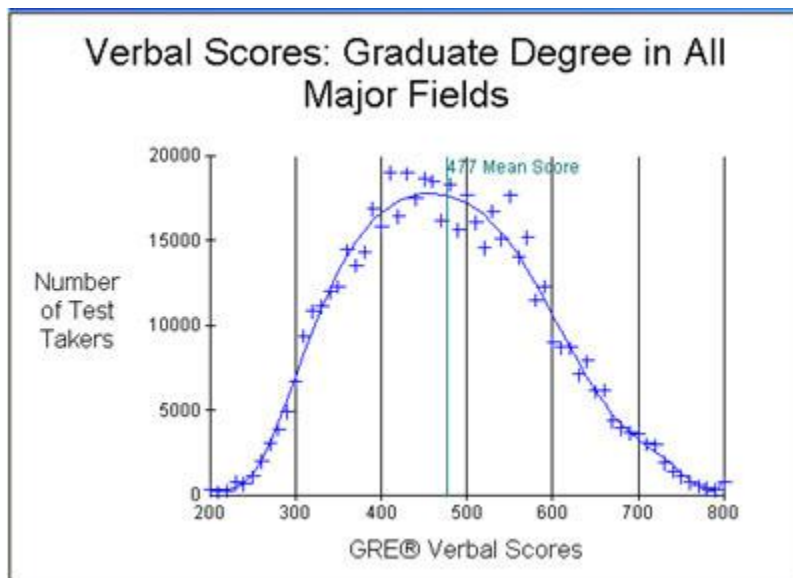
The major *limitation* in this project is that the statistical analysis was performed on limited data, only for some schools of Prishtina. Even though 3267 results were collected, the fact that this sample was not determined randomly might affect the final result. In addition, every method used to statistically examine these test scores (normality check, ANOVA, and regression) has its limitations and drawbacks; thus, they will be discussed separately throughout the project. Another limitation is that due to limited time only three sections of the entire test were used for

the analysis. The test is composed out of two sections: the general section and the specific section. The general section contains 120 scores divided amongst Albanian (50 points), English (40 points), and Math (30 points). All students, regardless of their concentration are to be examined in the same general questions. The specific section, which totals 80 points, is determined based on student's concentration. This section, due to the limited time and huge amount of data, was disregarded in this project.

## Chapter 4: Normality check

One special property of standardized tests is that the distribution of their test scores is normal. What this means is that there will be a mean around which most of people will score while only a small fraction of people will score the highest and the lowest points. Thus, the distribution will have a bell-shaped curve. The Figure 4.1 displays the distribution of the verbal sections scores in a GRE Test, which is a standardized test. It shows that the mean of GRE scores for this section is 477, with approximately 60% of the data being around the mean or one standard deviation far from the mean.

**Figure 4.1** Distribution of Verbal Scores of the GRE test

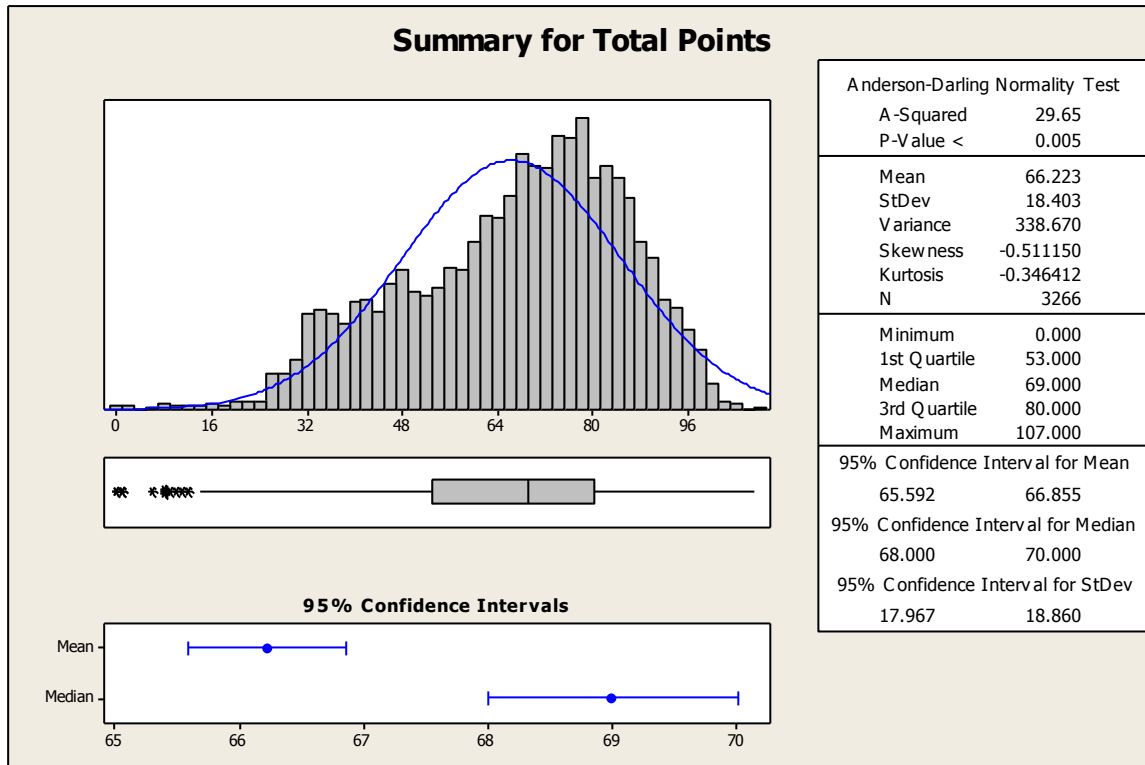


**Source:** "GRE and IQ" by Arun Musings

## Normality Check: The Results

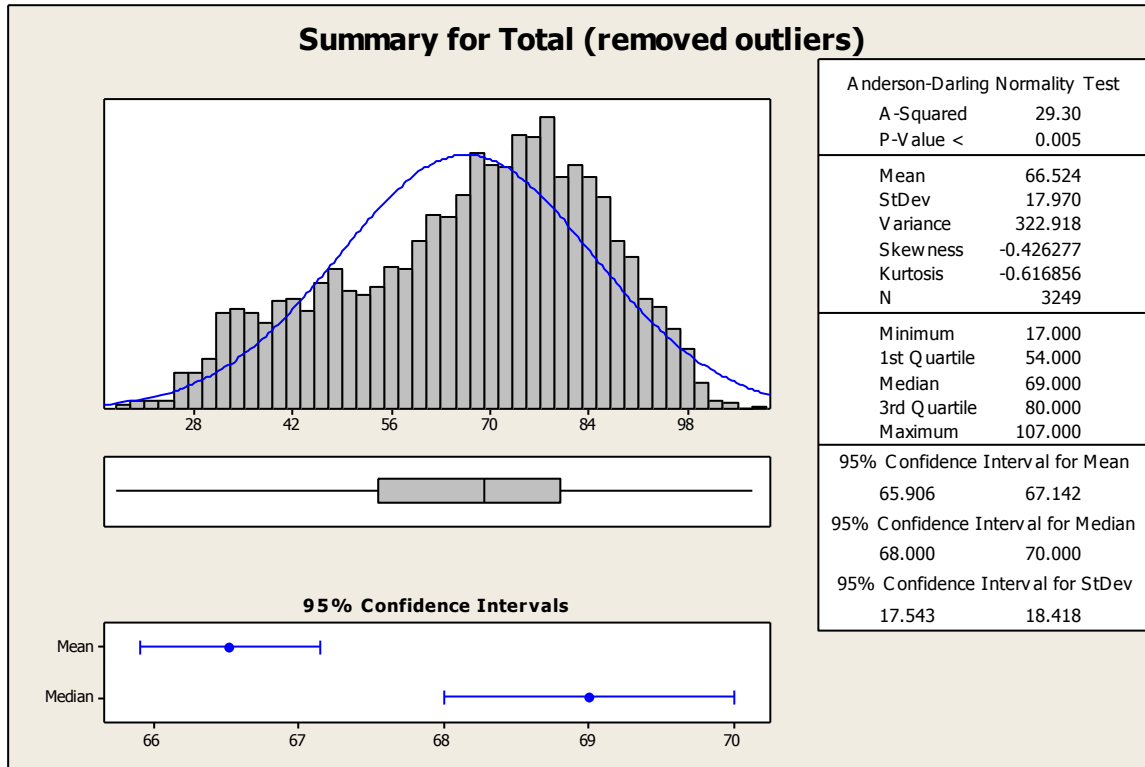
In order to see whether this rule of normal distribution in scores applies in Kosovo's Matura Exam, a normality check was performed for the total scores of Prishtina's schools. The Minitab results showed the following:

**Figure 4.2** Normal Distribution of Total Points



The main statistic that helps in determining the whether the data is normally distributed is the P-value. Assuming a risk factor of 5%, a P-Value larger than 5% means that the data is normally distributed. However, in this case, the P-Value which is smaller than 0.05 (or 5%) shows that the distribution of the test results is not normal. Below the chart that is presented in this figure, there is a boxplot. The asterisks in the boxplot represent outliers, or unusual causes. Because in theory this distribution should have been normal, another normality check test was performed. The second test has excluded the outliers. Because in Figure 4.2 it is noticeable that anyone who scored less than 16 points is an outlier, all these scores were eliminated from the data set and the normality check was performed again.

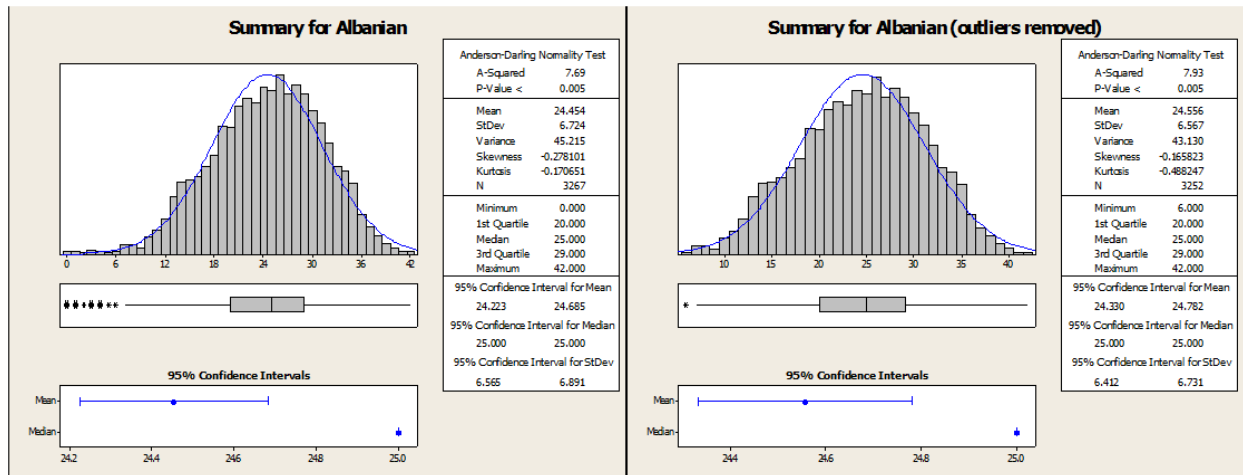
**Figure 4.3** Normal Distribution of Total Points (without outliers)



Unfortunately, even after the removal of the outliers in Figure 4.3, the P-Value has not changed, indicating that the distribution of the total test scores is not normal. The other indicators presented in the right side of the figure have changed only slightly. The average test score in Prishtina is 66.52 points, meaning just a little above the 50% threshold (which is 60 points). In addition, the median is 69 points.

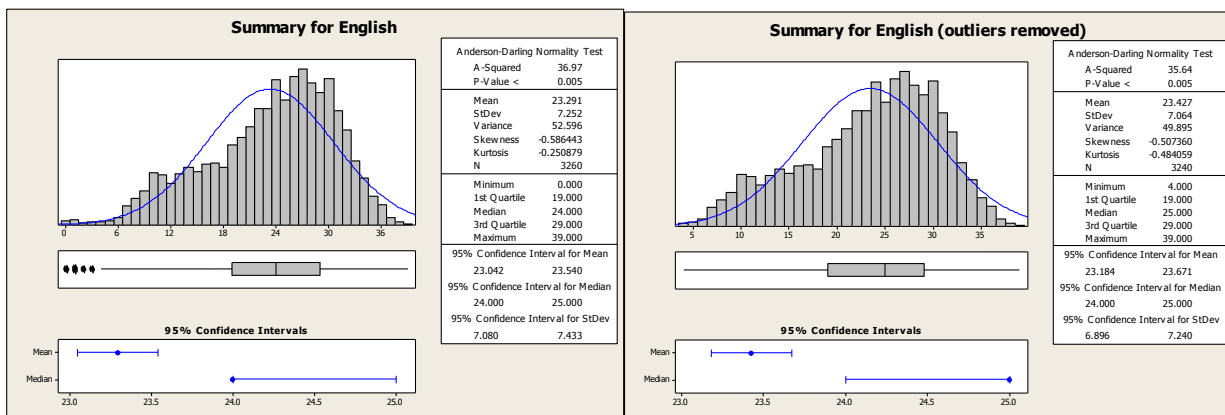
To see whether the distribution of the scores in specific sections, English, Albanian, and Math, is bell-shaped, the following figures are presented.

**Figure 4.4** Normal Distribution of the scores in the Albanian section with and without outliers



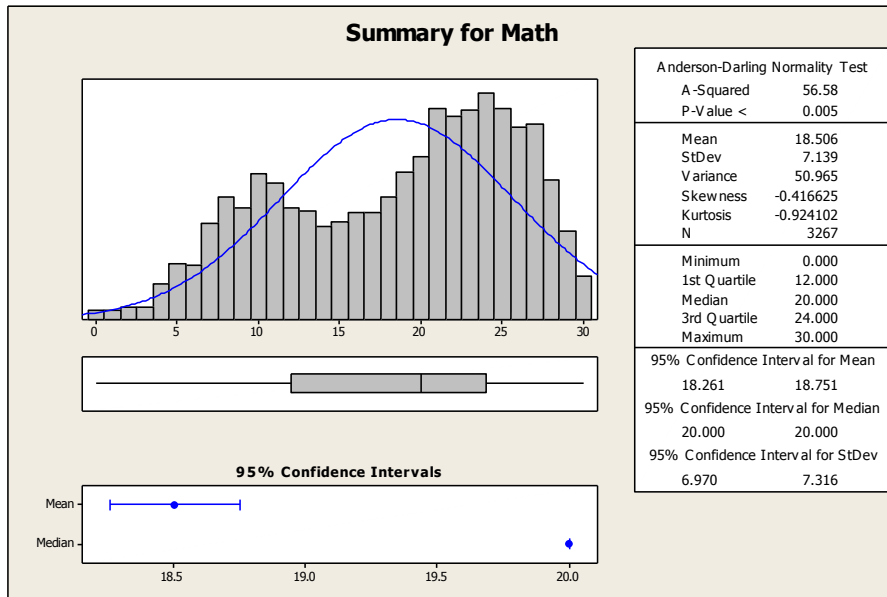
As seen from the both charts in the Figure 4.4, the distribution of the scores of the Albanian section are not the normal in both of the cases (with outliers and with outliers removed). The following paragraph, which includes the analysis, will look more into what the not normally distributed scores mean for the tests.

**Figure 4.5** Normal Distribution of the scores in the English section with and without outliers



Similarly to the scores in Albanian, as seen in the Figure 4.5, the distribution of the scores of the English section is not normal in both of the cases (with outliers and with outliers removed). The Analysis Chapter will look more into what this means for the tests.

**Figure 4.6** Normal Distribution of the scores in the Albanian section with and without outliers



The distribution of the Math scores, as it can be seen from Figure 4.6, does not contain any outlier, meaning that there was no need to conduct the test twice. Again, the P-Value which is smaller than 0.05 (or 5%) shows that the distribution of the test results in the Math section is not normal.

In conclusion, regardless of whether the analysis was performed on the total points of the general part of the exam (meaning Albanian, English, and Math added together) or in the specific parts, the distribution of the scores remained not normal. That was also the case when outliers were removed from the data set.

### Normality Check: Analysis and Discussion

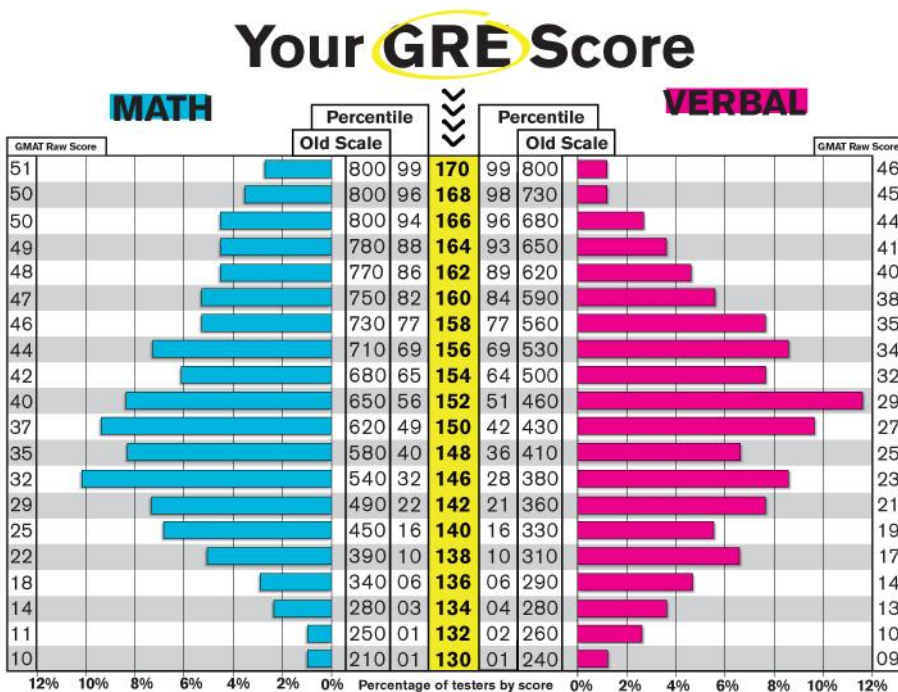
The normal curve is a practical approach for assessing the scores of individuals. Its benefits rely on the fact that it can be used to compare individuals with other individuals, individuals with groups, or groups with groups. The reason why the normal curve is very beneficial for comparisons is that it can also be used to create tables with percentiles. By creating tables, people can easily see where their scores fit in comparison to the population scores. They can assess themselves better relative to the other test takers instead of assessing themselves relative to the test.



Let's consider the example of the GRE (The Graduate Record Examinations) test, which is a standardized test administered by the Educational Testing Service. GRE is composed of three sections: Verbal Reasoning, Quantitative Reasoning, and Analytical Writing. The range of scores that students receive on Verbal Reasoning and Quantitative Reasoning is from 130 (minimum score) to 170 (maximum score) while the range for Analytical Writing is from 0 to 6.

Figure 4.7 illustrates a GRE Percentile calculation. The yellow column represents the scores while the bar lines represent the percentiles. The bar lines at the same time show the bell-shaped curve from which the percentiles are derived from.

**Figure 4.7** Your GRE Score



**Source:** Princeton Review

Thus, if the test taker has the scores of 151 on Verbal Reasoning, 156 on Quantitative Reasoning and 4.0 in Analytical Writing, he/she will receive their scores just like in fig. 4.8 below. Right next to the actual scores, the test taker will see his/her scores in comparison to the population. This means that they will know that 50% of the other test takers have scored less than them in

Verbal Reasoning, 64% of the other test takers have scored less than them in Quantitative Reasoning, and 56% of the other test takers have scored less than them in Analytical Writing.

**Fig. 4.8** GRE Results Table

**General Test Scores**

Test Date	Verbal Reasoning*				Quantitative Reasoning*				Analytical Writing	
	Prior Format		Current Format		Prior Format		Current Format		Score	% Below
	Scaled Score	Estimated Current Score	Scaled Score	% Below	Scaled Score	Estimated Current Score	Scaled Score	% Below		
12/18/2014			151	50			156	64	4.0	56

**Source:** Educational Testing Service

The fact that the distribution of the scores is not normal for the three general courses in the Matura Exam means that we cannot construct percentile tables to which students can compare their results. Thus, the implications of not having a normally-distributed curve are:

1. Test takers find it more difficult to compare their results with other test takers.

As explained in the GRE example, a normally-distributed curve makes it easier for the students to know where they stand in comparison to other test takers. If the student has scored 150 points on the exam, it means that he/she has answered correctly 75% of the time. The issue with this percentage is that it does not tell anything unless it is being compared to what others have scored. That's because when it comes to competing for universities, students are competing with other test takers instead of with a rigid, score criterion.

This also means that the same amount of points is going to worth less if there are a lot of people who have achieved equal or higher scores. Adversely, the same amount of points is going to worth more if there are only a few people who have scored equal or more points. Hence, the implication of not having normally-distributed score distributions is that students do not know the true worth of their points.

2. Universities find it more difficult to set a criterion about the test scores.

Most universities set criteria for the students that they will accept. However, it is easier for them to set a percentile declaring that only students above the 90<sup>th</sup> percentile will be considered

instead of declaring that only students who have scored more than 160 points will be considered. The problem with the second approach is that they do not know how many students would be eligible to apply. 160 points can result in too many to too little applicants being eligible. That is another reason why a normal curve makes it easier to interpret what the scores mean.

However, it is to be acknowledged that the normality check performed in figures 4.2 and 4.3 has some shortcomings. Initially, the data gathered involves only the 2014 results. This means that the data used to calculate whether the distribution is normal involves only the data from one year. The problem with using only one year in constructing normality checks and percentile tables is that questions change from year to year leading to differences in the performance of students from one year to the other. This implies that the wideness of the curve and the position of the curve can change from year to year which would lead to the same points being interpreted differently. For example, getting 80% questions right on one year may mean a better result than getting the same result next year. Such a thing makes it difficult for the students to assess themselves and to assess their chances of getting accepted in the University of their choice.

## **Chapter 5: Analysis of the Variance (ANOVA)**

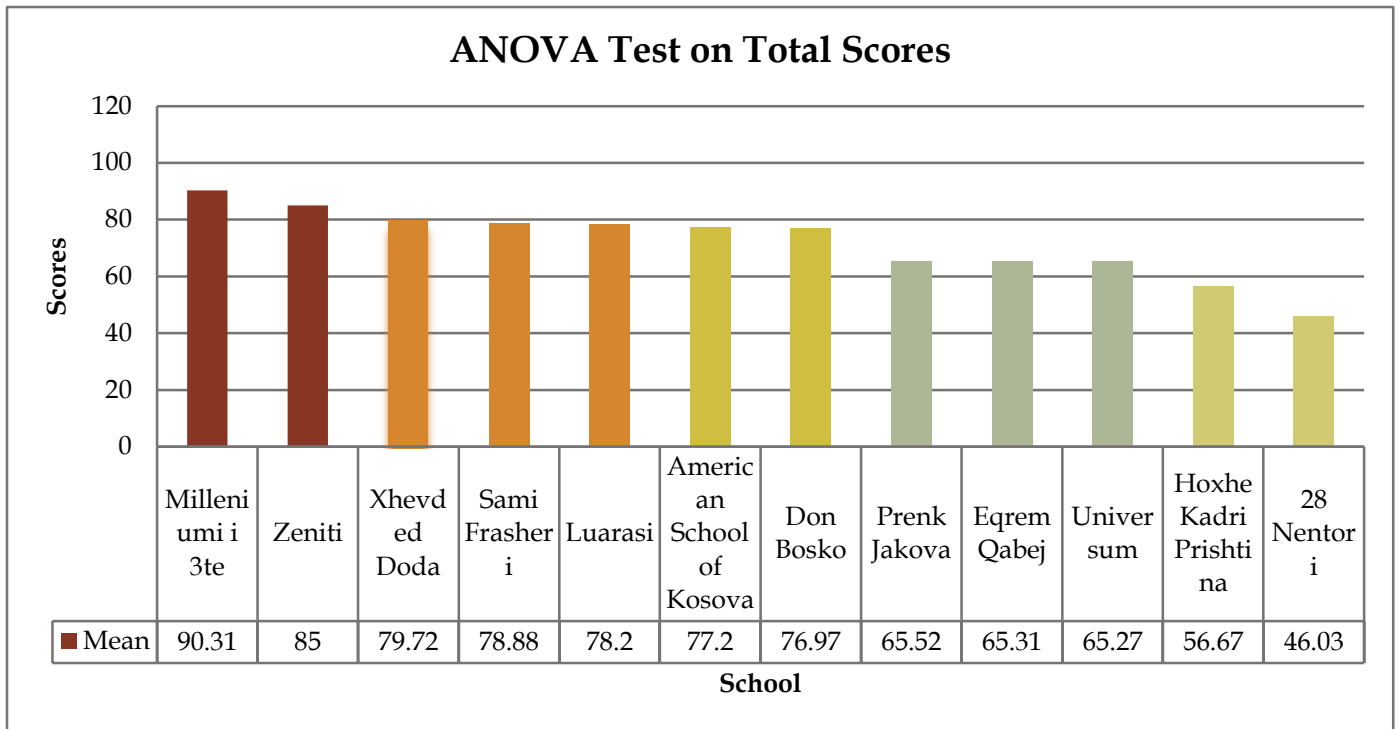
The goal of this section of the project was to determine whether there is statistical difference between schools' results. If so, the second goal was to identify the schools that performed the best and the schools that performed the worse. The technique used to calculate the aforementioned was the Analysis of Variance (ANOVA).

ANOVA is a tool used to analyze the differences between means of groups. While t-test used in statistics is able to compare not more than two means at once, the benefit of ANOVA is that it can compare more than three means. Developed by R.A. Fisher, ANOVA conducts a statistical test to determine whether the means of several groups or categories are equal (Stigler 2008). It is also useful in comparing the means for statistical significance. This Analysis of Variance test was conducted in Minitab. The Fisher's Test was selected to be performed so that the schools would be ranked according to their performance. The mean scores of the schools were compared between each other and the figures illustrated in this section include color-coded bar charts so that the reader can better see the difference in the schools' results.

### **ANOVA: The Results for General Section of the Test**

Figure 5.1 illustrates the comparison of the means for the total scores. As it can be seen from the figure, "Milleniumi i 3te" and "Zeniti" have statistically higher total scores in the general section than the rest of the schools. They are followed by "Xhevded Doda," "Sami Frasheri," and "Luarasi." "American School of Kosova" falls into the third category together with "Don Bosko." The last two categories include "Prenk Jakova," "Eqrem Qabej," and "Universum" on one hand and "Hoxhe Kadri Prishtina" and "28 Nentori" on the other.

**Figure 5.1** ANOVA Test on Total Scores



**ANOVA: The Analysis and Discussion for the General Section of the Test**

In order to fully grasp what Figure 5.1 means and whether the above mentioned schools differ statistically from each other, the Tukey Method was used. This method is used to check if the means of multiple groups differ significantly from each other (Hogben 1963).

Once this test was performed, the results were those displayed on Figure 5.2 below.

**Fig. 5.2** Tukey Test on Total Scores

```
Grouping Information Using Tukey Method

School           N   Mean  Grouping
Milleniumi i 3te  26  90.31  A
Zeniti           11  85.00  A B
Xhevded Doda    364  79.72  B
Sami Frasheri   866  78.88  B
Luarasi         15  78.20  A B C
American School of Kosova  40  77.20  B C
Don Bosko       220  76.97  B C
Prenk Jakova    50  65.52  D
Eqrem Qabej     209  65.31  D
Universum       15  65.27  C D E
Hoxhe Kadri Prishtina  926  56.67  E
28 Nentori      525  46.03  F

Means that do not share a letter are significantly different.
```

What Fig. 5.2 suggests is that if schools share the same grouping letter, then they are not statistically different. This means that “Milleniumi i 3te” and “Zeniti,” who are both grouped as A schools, are not statistically different from each other. Alternatively, if schools don’t share a grouping letter, then they are statistically different from each other. Such an example could be “Hoxhe Kadri Prishtina,” which is grouped as an E school, and “28 Nentori,” which is grouped as an F school.

The next couple of paragraphs will discuss some of the things that might have impacted the scores of the schools. One of the main arguments presented is that the range of the results is higher in larger schools, meaning that the larger schools have produced really high-scoring students and really low-scoring students at the same time. Another argument discusses the performance of general education schools in comparison to the professional education schools. The last discussion point focuses on the criticisms of this model and its possible limitations.

Figure 5.1 indicates that the school that performed the best in terms of scores is “Milleniumi i 3te.” This school is a private institution offering only two concentrations, which at the same time means that it has lower number of students. “Zeniti,” which is a really small private school, presents a similar case also. The reason this information is being disclosed is that even though

private schools are the ones that have achieved best score averages, the public schools are the ones that have the most students who have achieved high scores. If we were to compare the number of students that scored more than 75% in the general part of the test, we'd see that 241 of the students who had graduated from "Sami Frasheri" and "Xhevded Doda," which are public schools, had surpassed that percentage while only 15 who had graduated from "Milleniumi I 3te" and 0 (none) from "Zeniti" had achieved similarly. This is because the public schools in Prishtina are considerably larger than their private counterparts; thus, the chances that their scores having higher ranges (maximum scores minus minimum scores) are greater.

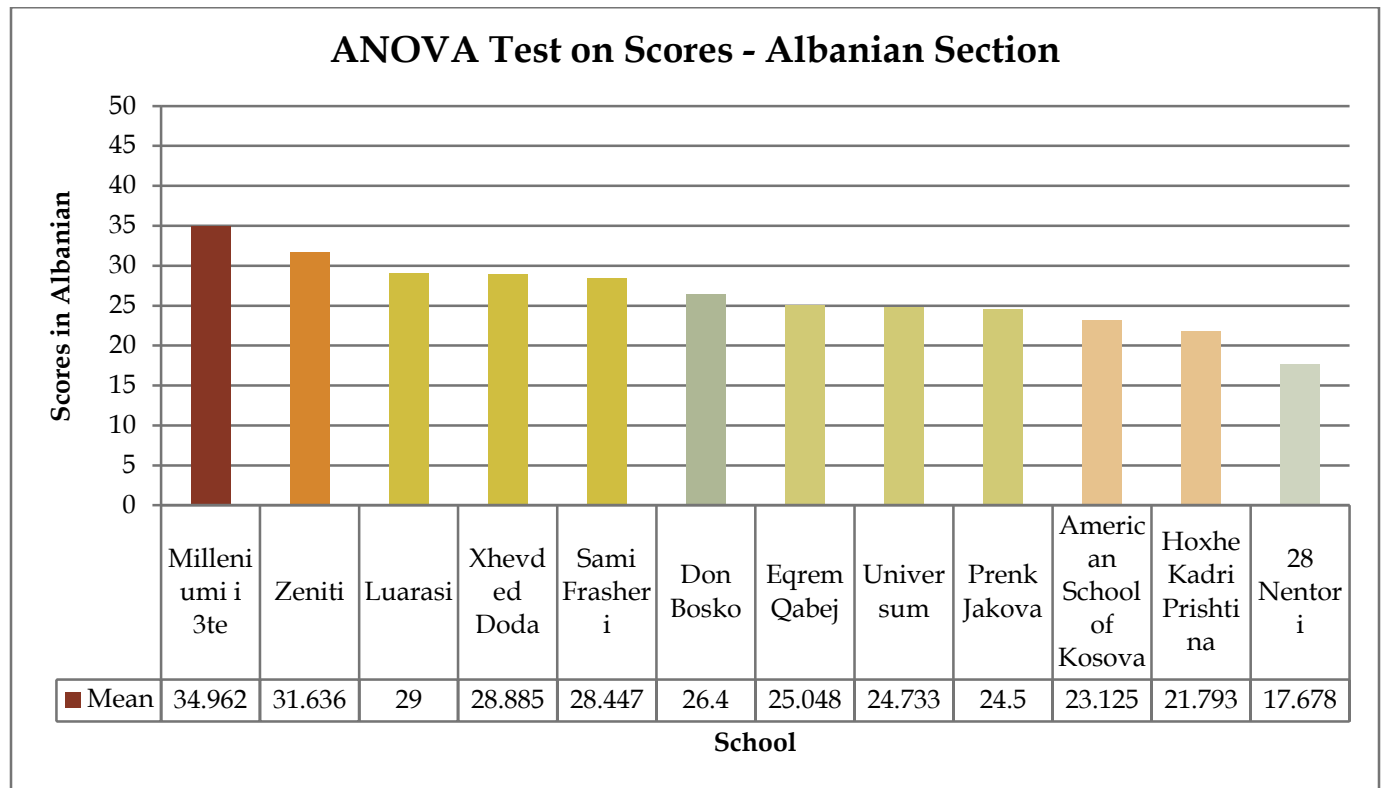
Another thing that should be looked upon is the performance of general education schools in comparison to the professional education schools. The six best high schools that are listed in the figure 5.1 offer general education. They are followed by a public school that offers a mixed program that includes both general education concentrations and professional education concentrations. The rest of the schools, which have scored the worst are all professional schools, besides Universum (which is a private general education school). The last two schools' means are even lower than 50% of the points, which means that they are not passing the bar. This shows that there is a clear difference between general and professional schools in terms of how well they do in the general section of the test. However, many people have expressed the criticism that the test is not fair to all schools. This implies that the test is easier for some schools, mainly the general education schools, and concentrations because it includes the topics they have covered. Thus, the common concern is that the test is more difficult for professional schools because the questions the test asks have not been covered in their curricula. This phenomenon is especially present when schools are compared in for the scores they received in the general section because the general education schools have had much more Albanian, Math, and English classes than the professional education schools. Hence, even though it can be seen that professional schools are performing worse, this situation can be justified by the fact that the students are underprepared to begin with.

### **ANOVA: The Results for Albanian**

The comparison of the means for the Albanian scores is presented in Figure 5.3. As it can be seen, "Milleniumi i 3te" has statistically higher scores in the than the rest of the schools. The second best school for Albanian is "Zeniti." It is followed by "Luarasi," "Xhevded Doda," and

“Sami Frasheri.” “Don Bosko.” falls into the fourth category while “Prenk Jakova,” “Eqrem Qabej,” and “Universum” fall into the fifth. Lastly, “American School of Kosova” and “Hoxhe Kadri Prishtina” are followed by “28 Nentori.”

**Figure 5.3** ANOVA Test on the Albanian Section Scores



**ANOVA: The Analysis and Discussion for Albanian**

In order to better understand what Figure 5.3 means and whether these schools differ statistically with each other, Tukey Method was used. The findings were as seen on Fig. 5.4 below. Looking at the grade letters in Figure 5.4, one can see which schools are statistically different from each other.



**Fig. 5.4** Tukey Test on Albanian

Grouping Information Using Tukey Method			
School	N	Mean	Grouping
Milleniumi i 3te	26	34.962	A
Zeniti	11	31.636	A B C
Luarasi	15	29.000	B C D E F G
Xheveded Doda	364	28.885	B D
Sami Frasherri	866	28.447	B D
Don Bosko	220	26.400	C G
Eqrem Qabej	209	25.048	F G H
Universum	15	24.733	D E F G H I
Prenk Jakova	50	24.500	E F G H
American School of Kosova	40	23.125	H I
Hoxhe Kadri Prishtina	926	21.793	I
28 Nentori	525	17.678	J

Means that do not share a letter are significantly different.

The total scores of the general section of the test indicate that “Milleniumi i 3te” and “Zeniti” were the best in terms of their performance in the test. Because the general part of the test is made out of the scores in Albanian, Math, and English, it is expected that the highest scoring schools in the general section will appear as the highest scoring ones in some of the subjects. The following paragraphs will analyze why some schools have scored low on average, how the larger schools have bigger score ranges than smaller schools, and the extent to which the concentration of a school might affect the scores in this section.

The best results that were witnessed in “Milleniumi i 3te” mean that its students scored on average 34.96 points, suggesting that students from this school have answered correctly on average 70% of the time. However, the focus should be on those schools that have scored less than 50% on these test sections. In this case, “Universum,” “Prenk Jakova,” “American School of Kosova,” and “28 Nentori,” seem to have scores less than 50%, meaning that they are below the bar on average. Such a thing could be seen as disturbing, especially for the private schools, in this case “Universum” and “American School of Kosova,” since it means that they are not preparing their students well in this regard. It should be noted, however, that one reason why

“American School of Kosova” has such an unfavorable result is that this school mostly teaches in English.

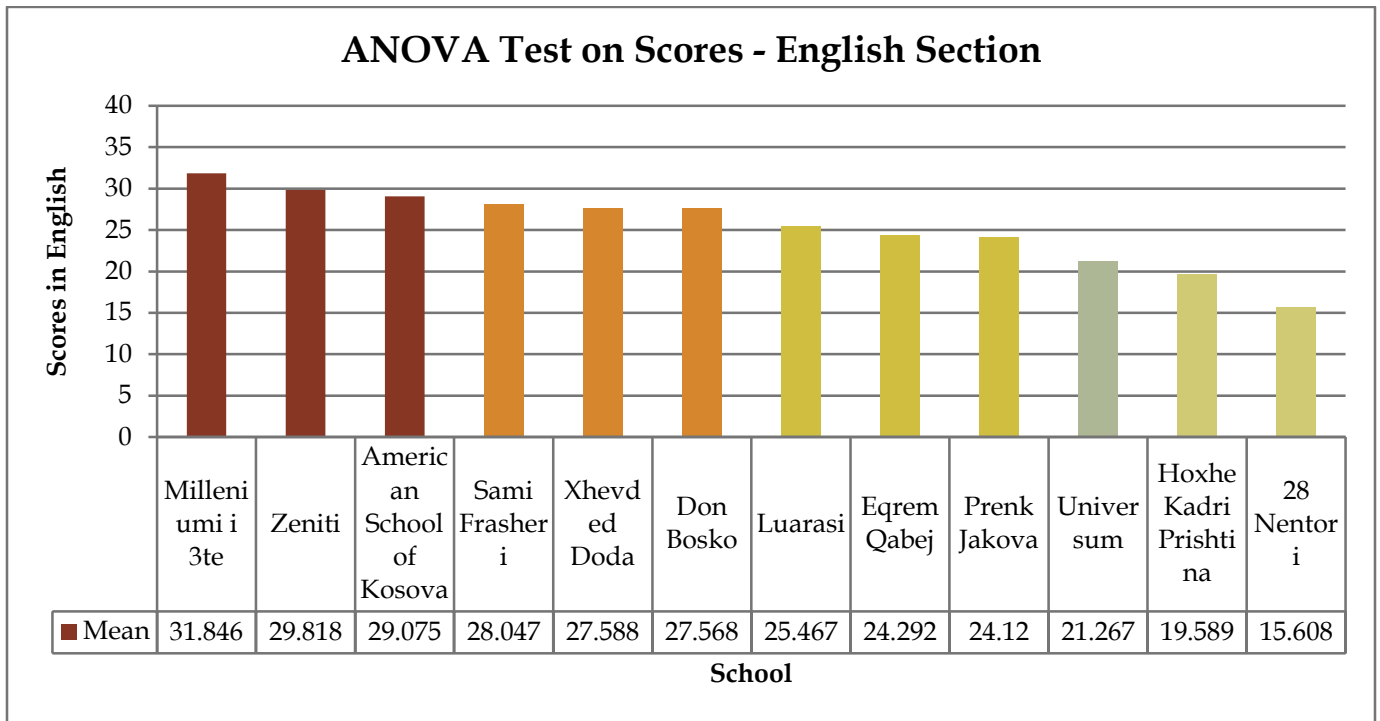
One of the reasons why “Milleniumi i 3te” has scored the most in the Albanian section compared to other schools might be the fact that is too small to have really low-scoring individuals. This means that it is easier for one teacher to teach in a school where the classrooms have less than 25 pupils in comparison to the large schools where the same teacher would teach in classrooms of 35 up to 45 pupils. This leads to the reason why these small schools are scoring better: there is always a bigger chance that larger schools have larger ranges, and thus really bad-scoring students who are weighting others down.

Another thing that should be noted is that not necessarily all schools have to score similarly in this section. Because they offer different concentrations, it is expected that those who have covered more content in Albanian will score more in this section. These schools would be followed by the schools that offer mixed programs while the least-scoring schools would be those whose concentration/s cover very little content in Albanian.

### **ANOVA: The Results for English**

Figure 5.5 illustrates the comparison of the means for the scores in the English section. As it can be seen from the figure, “Milleniumi i 3te,” “Zeniti” and “American School of Kosova” take the lead for this section. “Sami Frasheri,” “Xheveded Doda,” and “Don Bosko” are then followed by “Luarasi” “Eqrem Qabej” and “Prenk Jakova.” “Universum” seems to be in the fourth category while “Hoxhe Kadri Prishtina” and “28 Nentori” on the last.

**Figure 5.5** ANOVA Test on the English Section Scores



**ANOVA: The Analysis and Discussion for English**

Tukey Method was used to better grasp what Figure 5.5 means and whether these schools statistically differ with each other. The findings were displayed on Fig. 5.6 below. Looking at the grade letters in Figure 5.6, one can see which schools are statistically different from each other.

**Fig. 5.6** Tukey Test on Albanian

```
Grouping Information Using Tukey Method

School                N    Mean  Grouping
Milleniumi i 3te     26  31.846  A
Zeniti                11  29.818  A B C
American School of  40  29.075  A B
Sami Frasheri        866  28.047  B
Xhevded Doda        364  27.588  B
Don Bosko            220  27.568  B
Luarasi              15  25.467  B C D
Eqrem Qabej          209  24.292  D
Prenk Jakova         50  24.120  C D
Universum            15  21.267  D E
Hoxhe Kadri Prishtina 923  19.589  E
28 Nentori           525  15.608  F

Means that do not share a letter are significantly different.
```

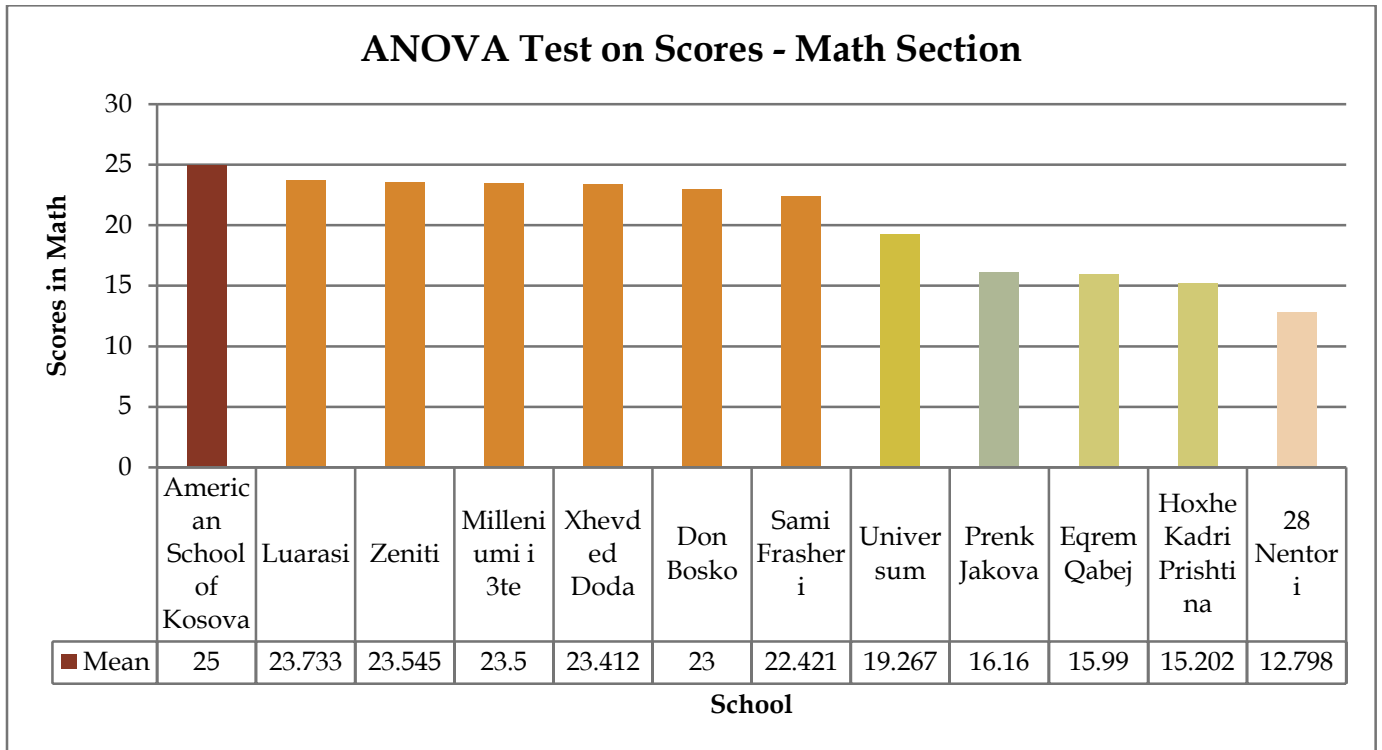
The results in the English section of the test are surprising, especially considering that the initial expectations that the “American School of Kosova” would score the most in this section since it is the only school in the list to teach its entire program in English. However, as seen above, this wasn’t the case. Another school that defied expectations was “Eqrem Qabej,” which is a language-oriented school, but which also scored lower than expected, especially considering their higher coverage of English and Albanian in their curriculum.

One interesting fact is that the three best-scoring schools in English are private schools. That may have happened as a result of one out of the two following scenarios. It is either the fact that private schools give more focus on teaching English or it is the fact that students’ parents are financing supplementing courses on English. Another interesting fact is that two public schools are at the least-scoring schools in English. “Hoxhe Kadri Prishtina” and “28 Nentori” seem to be at the bottom of the list. The averages of the scores that these two schools have received are lower than 50%, suggesting that these two schools would not even pass the bar in English.

### ANOVA: The Results for Math

The comparison of the means for the math scores is presented in Figure 5.7. As it can be seen from the figure, “American School of Kosova” takes the lead in this category. It is followed by “Luarasi,” “Zeniti,” “Milleniumi i 3te,” “Xhevded Doda,” “Don Bosko,” and “Sami Frasheri.” “Universum” falls into the third category while “Eqrem Qabej” and “Hoxhe Kadri Prishtina” fall into the fourth one. “28 Nentori” is the last school, meaning that it seems to be performing the worst in this category.

**Figure 5.7** ANOVA Test on the Math Section Scores



### ANOVA: The Analysis and Discussion for Math

The Tukey Method was used to better understand whether these schools statistically differ with each other. The findings were displayed on Fig. 5.8 below. Looking at the grade letters in Figure 5.8, one can see which schools are statistically different from each other.

**Fig. 5.8** Tukey Test on Math

Grouping Information Using Tukey Method

School	N	Mean	Grouping
American School of Kosova	40	25.000	A
Luarasi	15	23.733	A B
Zeniti	11	23.545	A B
Milleniumi i 3te	26	23.500	A B
Xhevded Doda	364	23.412	A B
Don Bosko	220	23.000	A B
Sami Frasheri	866	22.421	A B
Universum	15	19.267	B C
Prenk Jakova	50	16.160	C
Eqrem Qabej	209	15.990	C
Hoxhe Kadri Prishtina	926	15.202	C
28 Nentori	525	12.798	D

Means that do not share a letter are significantly different.

According to the ANOVA results, the “American School of Kosova” is the highest-scoring school. Additionally, the Tukey’s Test reveals that the six subsequent schools are statistically similar to the “American School of Kosova.” Another important observation about this category is that the four schools to have scored the highest in Math are private schools, followed by “Xhevded Doda,” which is a public school concentrated in science.

This section also had its surprise results. The expectation was that the school with the largest math program “Sami Frasheri” would score highest. However this was not the case, as it only ranked as the 7<sup>th</sup> school in Prishtina in Math. One reason behind this could be that the scores for the schools are calculated as the whole of all of their programs. Since “Sami Frasheri” is a large school with two other concentrations (a general and a social science one), it is possible that the scores of the students of the other concentrations diluted the total mean score “Sami Frasheri” as a whole.

Lastly, as previously discussed in the “Possible Sources of Error” section, it should be noted that there might be technical mistakes while typing the points for each school. Some schools were missing in the tables; other schools had missing sections. Thus, it should be stated that the results were derived by relying in a sample and not the whole population. That is why these results

might not necessary reflect the reality with 100% accuracy. This suggests that primary goal of ANOVA in this research project should not be to identify the best school in a section of the test; it should rather be to point out that schools are performing differently from each other.

## Chapter 6: The Regression Equation

The last section of the results contains a regression. The aim of this regression equation is to determine which variables affect students' scores in the Matura Exam. According to theory, there are multiple variables that affect students' performance in school. Under the assumption that the Matura Exam measures the students' performance, some of the factors that could influence the scores are: GPA, parental income, parental education, which school they attend, the public vs. private education they receive, the school generation size, the average student per class, school's budget per student, the amount of cheating on the test day, etc. What this means is that in order to fully grasp what the test scores are dependent on, a detailed analysis containing all these variables (and possibly more) would be needed.

### The Regression Equation: The Results

The regression equation presented in Figure 6.1 contains only some of the abovementioned variables. Because it was nearly impossible to gather the data for the other variables, this equation was constructed out of three dummy variables:

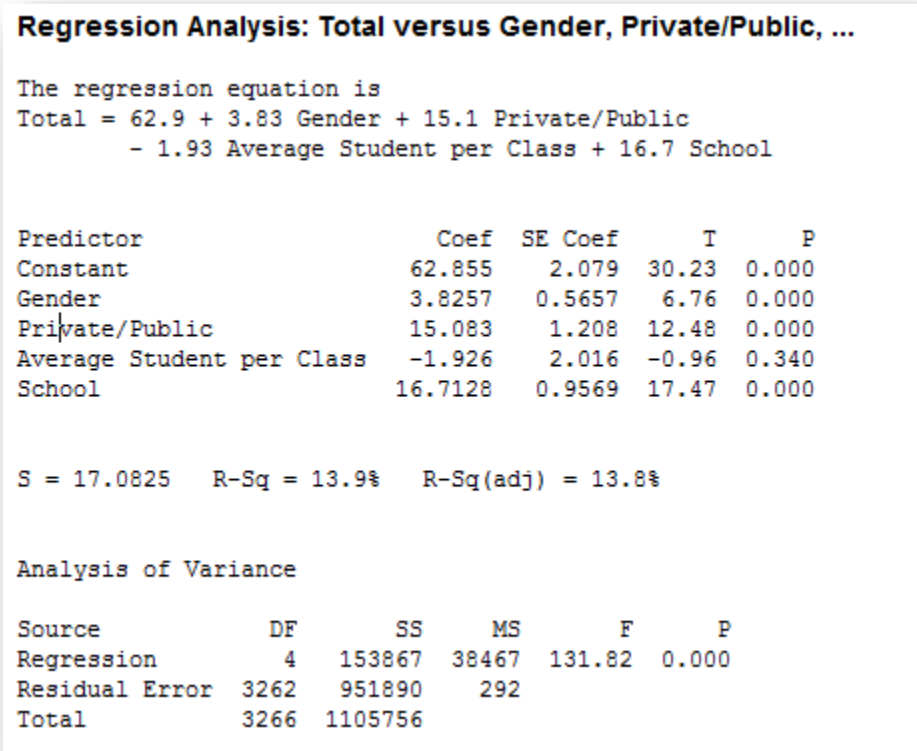
- “School” tested whether being a student in “Xhevded Doda” means performing better;
- “Gender” tested whether females perform better than males;
- “Private/ Public Education” tested whether private schools have performed better than the public schools;
- “Average Student per Class” tested whether a larger class size have higher scores than a smaller class size.

What this means for the equation is that less of the variability in test scores is explained by the variability in independent variables. According to the results, the independent variables explain 5.9% of the variance in the total scores.

The P-Values calculated by Minitab are used to determine which variables have a significant effect on the students' score. Based on the rule that a P-Value less than 0.05 means a significant variable, “Gender,” “School” and “Private Education” are significant in affecting the student's results while “Average Student per Class” is not significant in affecting the student's results.



**Figure 6.1.** Regression Analysis for Total Scores



### Description of the Variables

The following information represents the independent variables that were chosen for this regression, their significance and their impact on total scores.

The regression equation is:

**Total = 62.9 + 16.7 School + 3.83 Gender + 15.1 Private/Public**

**- 1.93 Average Student per Class**

### School

The low P-Value indicates that school is a significant variable in determining students' scores. School was selected as a dummy variable where the code for "Xhevded Doda," the highest-

scoring public school, was 1 while the code for the all other schools was 0. According to the regression equation, on average, a student of “Xhevded Doda” will score 16.7 more points than their counterparts in other schools if every other factor is held constant.

### **Gender**

The low P-Value indicates that gender is a significant variable in determining students’ scores. Gender was a dummy variable where the code for the males was 0 and the code for the females was 1. According to the regression equation, on average, females receive 3.83 more points than their male counterparts if every other factor is held constant.

### **Private Education**

The low P-Value indicates that the type of education that students receive (public or private) has an impact in determining students’ scores. Public and Private education was presented as a dummy variable in this equation. Public education was coded with 0 while Private education was coded with 1. The end result of the regression equation shows that based on the data, on average, enrolling in a private school increases students’ scores by 15.1 points.

### **Average Student per Class**

The high P-Value indicates that the average student per class is not a significant variable in determining students’ total scores. This variable was constructed as a dummy variable. Based on the available theory, it was decided to code all the schools whose class size was lower than twenty pupils with 0 and code all the schools whose class size was higher than twenty pupils with 1 (“How important is class size?” 2012). The result from the regression equation shows that based on the data, if there are more than 20 students per class, the students’ scores will decrease by 1.93 points.

## **The Regression Equation: Analysis and Discussion**

### **Limitations**

The main thing that should be mentioned is that the regression equation is highly limited. Although it tries to explain the variables that affect students’ scores in the Matura Exam, it should be stated that the equation does not include a lot of other relevant variables due to

unavailability of data. Thus, the independent variables explain only 5.8% of the variation in scores, as it was indicated by the R-Squared of the regression equation.

## **Chapter 7: Recommendations and Conclusion**

### **Further Research Recommendations**

Future research on this topic should be conducted from relevant authorities. These authorities include Kosovo's Ministry of Education, Science and Technology (MEST) and the Municipality Education Directorate (MED).

The first recommendation for further research is to replicate the same tests that were performed in this project but for the whole school population in Prishtina. Afterwards, it is recommended for the above mentioned authorities to publish the results online so that the students and parents would be better informed about Prishtina's schools. Since there is a possibility that the data gathered for the purposes of this project might contain mistakes caused while being manually typed, there is a chance that some figures might slightly change. Thus, for more accuracy, it is recommended for MEST to use the population sample to determine which schools are performing well and which schools need intervention.

It is also recommended for MEST to conduct these analyses every year so they could have time series data. Time series data would allow for them to see if schools are improving with time. They would help out on determining whether the policies and changes that MEST and MED have undertaken to improve the scores are effective or not.

MEST could also expand on the regression equation that was constructed in this paper. Given that they already possess more data about the students, they could create a regression equation that would include more variables than the one presented in this paper. Thus, they could explain better which factors are related to student's scores on the Matura Exam.

### **Policy Recommendations**

#### ***Recommendations for Normality Results***

The first policy recommendation is for MEST to create a test whose distribution is normal. MEST has a special division, which deals with the standardized tests - The Division for Assessment, Standards, and Monitoring. This division is responsible of creating the Matura Exam questions. This makes them the actors that could make changes to offset the unfavorable results displayed in the Normality Check Chapter. The main revelation of the Normality Check

Chapter was that even though the Matura Exam is stated in Kosovo's Law as a standardized exam, its distribution is not normal (The Law on Final Exam and State Matura Exam, 2008).

Thus, the first policy recommendation is for MEST to take for account the normality-check results when they formulate the questions. If the distribution is not normal, then they could create questions and test them into sample groups, something that authorities do with standardized tests abroad (Education Testing Service 2014). Standardized tests usually include an experimental, unscored section in each test so the test makers could test how the students are doing on those questions and which questions are to be put in the next test. This could encompass either tackling the difficulty of the questions or changing the structure of the exam. Tackling the difficulty of the questions would mean grouping the questions based on their difficulty (low, medium, and high) and use a mix of them to get a bell-shaped distribution. This way they could make sure that the distribution of the standardized tests scores follows a normal curve, something that is not the case with the Matura Exam at the moment.

However, the limitation that Kosovo has in terms of testing the questions first is that Matura Exam is organized twice per year only. That is different from other countries because they hold their standardized tests continuously throughout the year; thus, they have a medium in which they test their experimental questions. Having only two test dates per year is therefore a very limited available time to test experimental questions for students.

### ***Recommendations for the ANOVA Results***

A useful statistic for MED could also be the ANOVA test. This test can determine which schools in their municipalities are performing better in this test and which schools are not. Since municipalities are responsible of high school education, they could use the results from the ANOVA test to directly influence the schools in their municipalities.

MED and MEST could use these statistics to tackle the schools that are not performing well.

They could use these results as a reason to investigate on what's wrong with the low-scoring schools. If they end up discovering that the quality of the education that they receive from their teachers does not align with the standards set by the Ministry, they tackle teacher quality. An example could be offering trainings for those teachers, or even replacing them. Alternatively, if

they find out that the management of the school is affecting the low scores they should tackle the management of the schools. These are only some of the actors involved and the steps that they could take in this regard.

## **Conclusion**

The main findings of this research project were as follows. Firstly, although standardized tests are supposed to have a normal distribution, the distribution of the Matura Exam scores does not follow a normal distribution. Second, schools in Prishtina are statistically different in terms of how well they perform in the general section of the test. Thirdly, variables such as the school the student has attended and the private or public education the student has received are significant in determining student scores.

## Work Cited

Constitution of Kosovo. Law No. 04/L-032 on Education.

Constitution of Kosovo. Law No. 03/L-018 on Final Exam and State Matura Exam.

Bellaqa, Bashkim et al. (2014) "Education Statistics 2012-2013." Kosovo Agency of Statistics.

Retrieved September 12, 2014.

Fletcher, D. (2009, December 11). Standardized Testing. Retrieved September 18, 2014.

Hogben, D. (1963). *SOME PROPERTIES OF TUKEY'S TEST FOR NON-ADDITIVITY* (Order No. 6405896). Available from ProQuest Dissertations & Theses Full Text. (302128132).

Retrieved from

<http://search.proquest.com.ezproxy.rit.edu/docview/302128132?accountid=108>

How important is class size? (2012). Retrieved December 29, 2014, from

<http://www.greatschools.org/find-a-school/defining-your-ideal/174-class-size.gs?page=all>

How to Interpret Your GRE Scores. (n.d.). Retrieved January 15, 2015, from

<http://www.princetonreview.com/grad/gre-exam-score.aspx>

Kucnel, N., & Hezlett, S. (2007). Standardized Tests Predict Graduate Students' Success.

*ScienceMag*, 315(5815).

McDonald, A. et al. (2000). Aptitude Testing for University Entrance: A Literature Review.

Retrieved October 3, 2014.

Popham, W. J. (2001). *The truth about testing: An educator's call to action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Popham, W. J. (1999). Why Standardized Tests Don't Measure Educational Quality. Retrieved September 15, 2014.

Rideau, S. O. (2009). Teachers cheating on standardized achievement tests: Perceived causes and effects. ProQuest, UMI Dissertations Publishing).

Rotberg, I. (2006). Assessment Around the World. Retrieved September 18, 2014.

Stigler, S. (2008). Fisher and the 5% level. *Chance*, 21(4), 12.

doi:<http://dx.doi.org/10.1007/s00144-008-0033-3>

Turner, C. (2014, April 30). U.S. Tests Teens A Lot, But Worldwide, Exam Stakes Are Higher. Retrieved October 7, 2014.

Wenderoth, A., & Moo Sang, B. (2004, January 1). Situational Analysis of Education in Kosovo. Retrieved October 3, 2014.

Worthen, B. R., & Spandel, V. (1991). Putting the Standardized Test Debate in Perspective. Alexandria: Association for Supervision and Curriculum Development.



## Appendix 1: Student Scores

School	Albanian	English	Math	Total	Gender
1	39	30	27	96	1
1	34	27	25	86	1
1	39	32	23	94	1
1	25	21	24	70	1
1	32	27	29	88	1
1	24	27	28	79	1
1	19	23	23	65	1
1	25	26	28	79	1
1	26	32	26	84	1
1	34	30	24	88	1
1	35	34	29	98	1
1	26	32	25	83	1
1	31	34	29	94	1
1	35	32	27	94	1
1	38	32	28	98	1
1	26	33	25	84	0
1	27	25	28	80	1
1	33	34	29	96	1
1	18	30	28	76	0
1	35	32	28	95	1
1	25	31	28	84	0
1	27	24	29	80	1
1	25	27	27	79	1
1	21	29	25	75	0
1	24	28	30	82	0
1	22	29	28	79	0
1	35	34	28	97	0
1	21	27	29	77	0
1	24	21	26	71	0
1	27	27	28	82	1
1	26	29	26	81	0
1	20	30	18	68	1
1	22	17	29	68	1
1	36	27	13	76	1
1	21	28	29	78	1
1	24	31	28	83	1
1	25	23	29	77	0
1	24	33	25	82	0

1	20	32	29	81	0
1	21	29	23	73	0
1	30	22	24	76	1
1	18	34	29	81	0
1	19	26	26	71	0
1	32	30	24	86	0
1	25	28	17	70	1
1	28	31	27	86	1
1	21	31	22	74	1
1	27	36	18	81	1
1	22	24	17	63	0
1	21	33	26	80	1
1	28	32	19	79	1
1	30	29	11	70	1
1	27	27	19	73	1
1	27	28	18	73	1
1	27	28	18	73	1
1	21	22	17	60	0
1	27	22	21	70	1
1	24	23	14	61	1
1	31	27	27	85	0
1	27	23	12	62	1
1	17	23	13	53	1
1	36	34	25	95	1
1	32	34	21	87	1
1	33	32	12	77	0
1	27	25	20	72	1
1	32	29	14	75	1
1	27	24	26	77	1
1	29	26	23	78	0
1	32	33	27	92	0
1	29	32	26	87	0
1	27	27	16	70	0
1	26	23	14	63	0
1	23	31	23	77	0
1	29	25	21	75	1
1	23	20	18	61	0
1	21	22	18	61	0
1	35	31	21	87	0
1	24	30	15	69	0
1	30	30	22	82	0

1	29	30	21	80	1
1	15	24	14	53	0
1	23	21	20	64	0
1	17	21	12	50	0
1	32	32	23	87	0
1	22	26	20	68	1
1	30	34	16	80	0
1	32	21	21	74	0
1	23	24	19	66	0
1	26	25	8	59	0
1	30	36	26	92	1
1	23	30	22	75	1
1	31	26	21	78	1
1	25	30	17	72	0
1	21	25	21	67	1
1	24	30	22	76	1
1	22	30	21	73	1
1	35	34	23	92	0
1	28	22	23	73	1
1	23	26	21	70	1
1	26	22	23	71	1
1	29	29	18	76	1
1	31	37	23	91	1
1	33	37	25	95	1
1	28	33	19	80	0
1	29	32	25	86	0
1	28	37	26	91	1
1	22	26	27	75	0
1	22	24	15	61	1
1	19	25	11	55	0
1	29	34	16	79	0
1	27	26	24	77	1
1	29	35	18	82	0
1	34	29	20	83	1
1	24	30	23	77	1
1	29	33	19	81	1
1	22	30	22	74	0
1	32	29	20	81	1
1	29	36	26	91	1
1	26	28	20	74	1
1	29	34	28	91	1

1	27	25	22	74	1
1	35	38	27	100	0
1	36	29	26	91	0
1	24	27	16	67	1
1	27	28	19	74	0
1	25	29	21	75	0
1	24	27	6	57	0
1	24	18	20	62	0
1	24	19	21	64	0
1	28	25	19	72	0
1	31	27	22	80	0
1	28	24	21	73	0
1	34	31	26	91	0
1	24	21	22	67	0
1	26	31	8	65	1
1	31	32	7	70	1
1	28	29	22	79	0
1	37	28	29	94	0
1	27	25	21	73	1
1	28	26	23	77	1
1	30	28	21	79	1
1	30	27	21	78	1
1	28	27	28	83	0
1	28	26	29	83	1
1	37	35	24	96	1
1	37	33	24	94	1
1	35	30	23	88	1
1	32	27	24	83	1
1	32	27	22	81	1
1	32	27	14	73	1
1	26	26	13	65	0
1	21	26	23	70	0
1	26	30	23	79	0
1	23	22	16	61	1
1	28	24	21	73	1
1	29	19	20	68	1
1	24	22	12	58	1
1	26	27	22	75	1
1	19	23	21	63	1
1	37	29	29	95	0
1	26	25	17	68	0

1	30	16	23	69	1
1	25	31	21	77	0
1	26	22	21	69	1
1	25	31	22	78	1
1	28	27	29	84	1
1	24	27	21	72	1
1	25	30	26	81	1
1	24	22	19	65	1
1	26	21	18	65	1
1	19	20	17	56	1
1	30	25	15	70	1
1	22	19	18	59	1
1	33	28	25	86	0
1	28	19	15	62	1
1	33	29	27	89	1
1	26	29	27	82	1
1	25	22	16	63	1
1	35	27	19	81	1
1	26	24	21	71	0
1	28	29	22	79	1
1	33	32	19	84	1
1	30	32	21	83	1
1	37	32	21	90	0
1	30	32	21	83	0
1	29	27	16	72	0
1	31	32	19	82	0
1	28	24	15	67	1
1	28	26	21	75	0
1	8	10	8	82	0
1	30	26	13	69	1
1	40	27	25	92	1
1	30	27	13	70	1
1	29	27	12	68	1
1	30	28	24	82	1
1	29	26	15	70	1
1	26	30	23	79	0
1	27	27	22	76	1
1	31	32	21	84	0
1	32	21	27	80	1
1	35	29	28	92	1
1	24	22	22	68	1

1	35	34	22	91	0
1	34	34	22	90	0
1	35	28	28	91	1
1	39	28	26	93	0
1	36	27	27	90	1
1	31	27	20	78	1
1	28	29	14	71	1
1	32	26	11	69	1
1	39	26	27	92	1
1	27	26	20	73	0
1	25	28	20	73	1
1	28	25	17	70	1
1	28	28	22	78	1
1	28	27	22	77	1
1	29	29	20	78	1
1	28	27	21	76	1
1	28	28	16	72	1
1	25	26	17	68	1
1	25	22	19	66	1
1	27	30	17	74	1
1	23	26	16	65	1
1	27	30	19	76	1
1	19	25	19	63	1
1	26	26	17	69	1
1	29	25	21	75	1
1	26	27	14	67	1
1	24	27	17	68	0
1	28	29	17	74	0
1	27	21	14	62	0
1	28	25	16	69	1
1	29	28	14	71	1
1	27	26	21	74	0
1	32	26	21	79	0
1	28	29	20	77	0
1	27	29	20	76	0
1	31	28	20	79	0
1	28	25	18	71	1
1	31	27	22	80	1
1	28	22	21	71	1
1	22	24	19	65	0
1	33	27	10	70	0

1	33	26	22	81	0
1	24	25	19	68	0
1	24	25	18	67	0
1	27	26	22	75	0
1	28	25	20	73	0
1	27	26	21	74	0
1	28	23	22	73	1
1	24	30	13	67	0
1	26	29	12	67	0
1	28	27	18	73	0
1	33	28	10	71	0
1	27	27	11	65	1
1	34	26	10	70	0
1	23	27	29	79	0
1	28	28	12	68	1
1	27	27	13	67	1
1	26	21	25	72	0
1	29	26	11	66	0
1	29	27	12	68	1
1	32	29	10	71	0
1	28	28	20	76	1
1	30	23	14	67	0
1	28	27	17	12	1
1	27	32	25	84	1
1	32	23	15	70	1
1	28	28	15	71	1
1	31	33	19	83	0
1	33	31	18	81	1
1	31	27	10	68	0
1	32	27	16	75	1
1	30	28	10	68	1
1	28	28	23	79	0
1	36	31	14	81	0
1	36	30	14	80	0
1	27	24	16	67	1
1	24	26	15	65	0
1	32	29	29	90	0
1	23	28	17	68	1
1	42	32	16	90	0
1	28	26	20	74	1
1	24	30	21	75	1

1	23	23	10	56	1
1	25	31	21	77	1
1	27	25	18	70	1
1	30	27	19	76	1
1	34	29	21	84	1
1	21	27	16	64	1
1	32	31	13	76	1
1	32	30	11	73	1
1	29	28	15	72	1
1	32	23	14	69	0
1	30	23	12	65	1
1	28	26	12	66	0
1	24	26	15	65	0
1	30	27	10	67	0
1	28	26	28	82	1
1	30	24	12	66	0
1	27	22	6	55	1
1	25	31	24	80	0
1	28	25	24	77	0
1	24	31	20	75	1
1	25	30	24	79	1
1	34	27	18	79	0
1	30	27	19	76	1
1	29	27	15	71	0
1	30	25	15	70	0
1	35	30	20	85	1
1	28	30	21	79	1
1	20	31	25	76	1
1	36	27	22	85	1
1	33	28	13	74	0
1	35	26	8	69	1
1	34	25	15	74	1
1	19	30	25	74	0
1	26	29	22	77	1
1	18	30	25	73	0
1	28	30	21	79	0
1	29	24	22	75	1
1	29	26	19	74	0
1	25	23	17	65	1
1	29	25	26	80	0
1	31	26	21	78	0

1	24	31	24	79	1
1	35	26	8	69	1
1	23	27	21	71	1
1	36	28	13	77	1
1	36	31	23	90	1
1	29	25	20	74	0
1	23	31	20	74	0
1	27	32	25	84	1
1	25	30	24	79	0
1	33	21	21	75	0
1	32	23	19	74	0
1	25	30	21	76	1
1	28	29	21	78	0
1	40	30	15	85	1
1	17	21	20	58	0
1	22	19	16	57	1
1	29	23	21	73	1
1	25	22	17	64	1
1	34	27	20	81	1
1	33	22	18	73	0
1	32	24	18	74	0
1	34	27	20	81	1
1	33	30	19	82	1
1	34	29	19	82	1
1	34	28	17	79	1
1	26	26	15	67	0
1	24	11	6	41	0
1	22	30	23	75	0
1	21	18	16	55	1
1	17	17	7	41	1
1	19	26	22	67	1
1	21	27	24	72	0
1	19	11	5	35	1
1	22	26	16	64	0
1	23	23	24	70	0
1	32	36	5	73	1
1	22	22	21	65	0
1	17	23	19	59	0
1	29	27	16	72	1
1	25	23	17	65	0
1	28	31	17	76	0

1	26	21	13	60	1
1	32	24	11	67	1
1	25	22	20	67	1
1	24	27	22	73	1
1	21	27	10	58	1
1	24	23	22	69	1
1	27	32	21	80	1
1	19	16	7	42	1
1	25	22	17	64	1
1	24	26	10	60	1
1	22	23	20	65	1
1	38	29	5	72	1
1	20	3	12	35	1
1	24	27	16	67	0
1	26	29	21	76	1
1	29	31	27	87	1
1	17	23	22	62	0
1	22	13	15	50	0
1	27	24	21	72	1
1	18	27	17	62	1
1	21	28	19	68	1
1	25	29	27	81	0
1	30	31	20	81	1
1	7	14	12	33	0
1	12	10	7	29	1
1	0	0	0	0	1
1	20	16	15	51	1
1	18	23	12	53	0
1	24	31	24	79	0
1	21	18	21	60	1
1	14	14	11	39	1
1	10	32	12	54	1
1	18	26	24	68	0
1	25	23	22	70	1
1	19	25	15	59	1
1	32	27	21	80	0
1	27	19	20	66	1
1	22	19	14	55	0
1	26	24	21	71	1
1	18	20	11	49	0
1	34	19	23	76	1

1	15	13	16	44	1
1	29	28	9	66	0
1	34	18	18	70	1
1	19	23	20	62	1
1	20	24	12	56	0
1	22	22	12	56	1
1	35	27	26	88	1
1	23	27	22	72	1
1	28	28	17	73	1
1	34	28	23	85	1
1	26	21	14	61	1
1	23	18	18	59	1
1	27	23	11	61	0
1	32	30	23	85	1
1	29	23	22	74	1
1	36	27	18	81	1
1	23	25	13	61	1
1	13	21	9	43	0
1	31	28	21	80	0
1	35	24	22	81	1
1	22	23	14	59	0
1	21	18	10	49	0
1	14	13	7	34	0
1	19	20	9	48	0
1	24	30	11	65	0
1	29	23	15	67	1
1	17	27	13	57	1
1	29	14	26	69	1
1	27	16	5	48	1
1	17	21	10	48	1
1	19	27	16	62	0
1	23	24	21	68	0
1	20	30	23	73	1
1	21	28	24	73	0
1	27	27	22	76	1
1	24	24	22	70	0
1	30	29	9	68	1
1	27	30	24	81	0
1	29	30	27	86	0
1	21	29	26	76	0
1	29	22	23	74	0

1	28	26	21	75	1
1	21	24	23	68	1
1	21	26	23	70	0
1	16	28	26	70	1
1	27	25	26	78	0
1	25	28	29	81	1
1	28	30	7	65	0
1	23	29	29	81	1
1	14	28	19	61	1
1	22	22	11	55	1
1	29	21	13	63	0
1	27	26	20	73	0
1	29	20	16	65	1
1	26	23	17	66	0
1	29	27	11	67	1
1	24	29	23	76	1
1	25	26	21	72	1
1	23	25	23	71	1
1	25	26	26	77	1
1	24	19	17	60	0
1	23	27	24	74	0
1	18	18	17	53	0
1	25	31	24	80	0
1	20	30	20	70	1
1	33	27	13	73	0
1	32	27	22	81	0
1	25	24	27	76	1
1	33	33	23	89	0
1	24	25	25	74	1
1	31	25	28	84	0
1	34	28	24	86	0
1	28	32	22	82	1
1	36	30	24	90	1
1	29	33	28	90	1
1	35	28	22	85	1
1	35	32	27	94	1
1	32	28	27	87	1
1	31	30	24	85	0
1	22	31	21	74	1
1	26	26	22	74	1
1	22	25	22	69	0

1	33	28	29	90	1
1	33	32	25	90	0
1	32	28	24	84	1
1	33	30	22	85	1
1	28	32	18	78	1
1	26	31	26	83	1
1	31	23	29	83	1
1	28	26	26	80	1
1	31	23	26	80	0
1	34	31	27	92	1
1	28	30	26	84	1
1	27	20	23	70	1
1	28	28	26	82	0
1	31	27	27	85	0
1	26	24	27	77	1
1	25	31	18	74	0
1	30	29	22	81	0
1	31	26	27	84	0
1	23	31	22	76	1
1	34	30	27	91	1
1	30	29	27	86	1
1	30	26	24	80	0
1	34	30	24	88	1
1	32	30	27	89	1
1	28	24	23	75	1
1	30	32	27	89	1
1	28	32	25	85	1
1	29	32	24	85	1
1	31	32	22	85	1
1	29	31	28	88	1
1	28	30	27	85	1
1	28	27	27	82	1
1	24	27	18	69	1
1	30	32	27	89	1
1	28	30	19	77	1
1	28	30	28	86	1
1	32	29	24	85	0
1	28	33	26	87	0
1	31	32	27	90	1
1	26	27	27	80	1
1	27	24	21	72	1

1	24	31	26	81	1
1	28	31	27	86	1
1	26	34	25	85	1
1	31	31	28	90	0
1	26	30	27	83	1
1	32	37	25	94	0
1	31	31	24	86	0
1	26	26	22	74	0
1	29	29	23	81	1
1	29	31	24	84	0
1	28	29	20	77	1
1	29	28	20	77	1
1	28	26	24	78	1
1	29	26	27	82	0
1	31	27	28	86	1
1	28	31	26	85	0
1	23	24	22	69	1
1	21	26	22	69	1
1	28	30	23	81	1
1	29	31	26	86	0
1	28	24	25	77	1
1	27	30	20	77	1
1	35	28	17	80	1
1	32	33	27	92	1
1	32	28	22	82	1
1	30	27	28	85	1
1	31	36	29	96	0
1	31	36	29	96	0
1	27	31	28	86	0
1	30	31	29	90	1
1	32	33	29	94	0
1	35	34	29	98	0
1	26	32	28	86	1
1	31	33	28	92	0
1	31	31	28	90	0
1	33	34	28	95	1
1	26	27	28	81	0
1	26	26	28	80	1
1	29	28	27	84	1
1	32	30	26	88	1
1	30	30	27	87	1

1	26	31	27	84	1
1	32	30	28	90	0
1	26	32	28	86	1
1	24	29	27	80	1
1	32	30	28	90	0
1	30	25	25	80	1
1	26	29	27	82	1
1	27	27	21	75	1
1	24	33	29	86	1
1	27	31	28	86	1
1	32	29	21	82	1
1	31	29	29	89	1
1	31	28	29	88	1
1	39	33	2	100	0
1	34	28	30	92	1
1	32	33	29	94	1
1	38	33	28	99	1
1	35	32	29	96	0
1	29	27	30	86	0
1	40	2	30	99	1
1	31	37	28	96	0
1	37	31	29	97	0
1	36	31	29	96	1
1	30	37	27	94	1
1	32	27	25	84	1
1	29	28	27	84	0
1	25	25	28	78	1
1	28	32	27	87	0
1	30	25	27	82	0
1	38	33	27	98	1
1	30	27	27	84	1
1	26	26	30	82	1
1	33	30	28	91	0
1	31	32	24	87	1
1	38	31	28	97	1
1	30	36	28	94	0
1	29	25	27	81	0
1	31	28	28	87	0
1	29	32	25	86	1
1	32	35	28	95	1
1	28	24	27	79	1

1	30	32	25	87	0
1	29	29	18	76	0
1	29	26	19	74	0
1	31	34	28	93	1
1	29	30	26	85	1
1	35	32	27	94	1
1	26	21	23	70	0
1	32	28	22	82	0
1	33	30	21	84	1
1	27	28	23	78	1
1	31	28	25	84	0
1	39	32	26	97	0
1	23	24	23	10	1
1	18	24	24	66	1
1	34	29	30	93	0
1	26	28	24	78	0
1	26	28	24	78	0
1	38	32	28	98	0
1	38	32	27	97	0
1	23	16	15	54	1
1	33	30	27	90	0
1	36	30	27	93	1
1	27	36	27	90	1
1	29	32	24	85	1
1	34	32	30	96	0
1	34	29	26	89	0
1	31	32	24	87	0
1	29	31	28	88	0
1	36	31	27	94	0
1	37	34	26	97	1
1	35	29	30	94	0
1	36	30	27	93	0
1	37	32	28	97	1
1	27	31	27	85	1
1	28	32	26	86	1
1	35	32	25	92	1
1	38	35	25	98	1
1	30	36	28	94	1
1	32	31	25	88	0
1	37	31	25	93	0
1	34	32	25	91	1



1	31	29	30	90	1
1	32	34	29	95	1
1	27	32	26	85	0
1	35	31	30	96	0
1	28	31	26	85	0
1	33	35	30	98	0
1	38	32	30	100	0
1	35	35	29	99	0
1	29	33	27	89	1
1	36	31	25	92	1
1	39	35	28	102	0
1	38	29	25	92	0
1	38	28	25	91	1
1	35	32	25	92	0
1	37	29	25	91	0
1	37	33	27	97	1
1	36	29	26	91	0
1	35	31	30	96	0
1	31	32	25	88	0
1	32	28	30	90	1
1	31	28	25	84	1
1	34	30	26	90	1
1	32	24	28	84	1
1	35	31	29	95	0
1	34	31	28	93	0
1	33	33	28	94	0
1	35	36	27	98	0
1	35	36	29	100	0
1	29	28	27	84	0
1	34	30	27	91	1
1	34	33	29	96	0
1	35	31	27	93	1
1	36	31	26	93	1
1	33	29	25	87	0
1	31	31	30	94	1
1	33	34	30	97	1
1	30	33	29	92	1
1	27	33	29	89	11
1	30	33	29	92	1
1	31	28	30	89	1
1	30	31	26	87	1

1	25	32	26	83	0
1	29	29	29	87	0
1	29	33	29	91	1
1	28	33	29	90	0
1	31	28	28	87	0
1	27	27	28	82	1
1	31	30	30	91	0
1	24	30	28	82	0
1	33	29	28	90	0
1	28	30	27	85	0
1	31	23	28	82	1
1	30	25	25	80	0
1	30	31	29	90	0
1	29	30	28	87	0
1	36	32	27	95	1
1	33	33	29	95	1
1	32	33	30	95	1
1	29	36	26	91	0
1	31	34	24	89	1
1	29	32	22	83	1
1	34	35	30	99	1
1	32	35	30	97	0
1	30	35	28	93	0
1	31	33	26	90	0
1	31	34	27	92	0
1	32	36	25	93	0
1	34	34	29	97	1
1	32	33	28	93	1
1	32	33	28	93	1
1	20	34	24	78	1
1	28	35	30	93	1
1	34	33	30	97	1
1	25	35	26	86	1
1	30	33	23	86	1
1	19	33	23	75	1
1	29	35	30	94	0
1	19	35	25	79	1
1	32	35	30	97	0
1	35	34	28	97	1
1	34	32	29	95	1
1	32	33	29	94	1

1	36	35	28	99	1
1	32	34	30	96	1
1	27	32	29	88	1
1	35	36	30	101	0
1	33	35	30	98	0
1	31	35	29	95	0
1	32	34	29	95	1
1	34	35	28	97	0
1	30	30	26	86	0
1	31	31	25	87	0
1	31	31	25	88	0
1	32	36	30	98	0
1	37	35	28	100	0
1	34	35	30	99	1
1	32	35	30	97	1
1	33	36	26	95	0
1	32	34	27	93	0
1	33	31	27	91	0
1	28	30	26	84	1
1	35	30	26	91	1
1	28	30	26	84	1
1	29	33	22	84	1
1	34	31	26	91	1
1	20	35	29	84	1
1	36	30	24	90	0
1	34	32	24	90	0
1	28	36	28	92	0
1	28	35	27	90	0
1	29	33	27	89	0
1	31	28	26	85	1
1	25	27	25	77	0
1	33	29	30	92	1
1	34	34	27	95	1
1	31	11	26	68	0
1	32	32	28	92	1
1	36	31	28	95	0
1	35	32	27	94	0
1	36	32	28	96	0
1	34	25	25	84	1
1	33	28	21	82	1
1	29	34	25	88	1

1	19	35	23	77	0
1	30	33	26	89	1
1	26	26	26	78	0
1	34	20	24	78	0
1	34	26	26	86	0
1	17	35	21	73	0
1	39	37	27	103	0
1	24	14	27	65	0
1	34	29	29	92	0
1	33	31	30	94	0
1	32	29	17	78	0
1	17	12	13	42	0
1	31	27	26	84	1
1	30	28	24	82	1
1	32	26	25	83	0
1	34	29	25	88	0
1	35	30	25	90	0
1	36	38	30	104	0
1	27	28	26	81	1
1	38	31	28	97	1
1	35	31	25	91	1
1	28	33	24	85	1
1	26	23	25	74	0
1	31	28	29	88	0
1	31	29	29	89	1
1	22	19	19	60	1
1	36	32	25	93	1
1	26	24	23	73	0
1	35	38	30	103	1
1	32	30	26	88	1
1	23	21	18	62	0
1	16	25	22	63	0
1	12	24	25	61	1
1	34	28	26	88	0
1	31	30	27	88	1
1	15	24	25	64	0
1	36	36	26	98	0
1	29	30	25	84	1
1	22	23	27	72	1
1	27	33	25	85	1
1	23	21	19	63	1

1	18	34	23	75	0
1	33	31	26	90	0
1	17	8	18	43	0
1	29	35	29	93	1
1	29	30	25	84	1
1	34	28	21	83	0
1	27	28	26	81	0
1	30	27	24	81	1
1	27	31	26	84	0
1	26	29	25	80	0
1	30	36	25	91	0
1	37	34	25	96	1
1	30	33	27	90	0
1	28	24	26	78	0
1	27	28	26	81	1
1	28	34	25	87	1
1	31	28	26	85	1
1	32	25	26	83	0
1	29	23	27	79	0
1	28	16	28	72	0
1	32	26	28	86	0
1	28	29	27	84	0
1	27	24	23	74	1
1	29	27	25	81	1
1	27	24	27	78	0
1	28	25	27	80	0
1	27	20	27	74	1
1	32	36	28	96	0
1	34	35	28	97	0
1	30	26	27	83	0
1	25	35	27	87	1
1	30	34	27	91	1
1	26	26	27	79	0
1	24	24	28	76	0
1	28	24	26	78	0
1	29	34	23	86	0
1	29	23	27	79	0
1	28	30	23	81	0
1	25	30	23	78	0
1	31	36	28	95	0
1	27	26	27	80	0

1	32	35	26	80	0
1	27	28	26	81	1
1	29	38	24	81	0
1	30	27	23	80	1
1	34	34	26	93	1
1	30	30	26	86	1
1	33	28	27	88	0
1	35	34	26	95	1
2	21	30	23	74	0
2	38	34	27	99	0
2	35	37	27	99	1
2	36	26	27	89	1
2	35	32	26	93	0
2	35	32	27	94	0
2	33	30	24	87	0
2	33	33	27	93	0
2	31	30	26	87	1
2	35	32	26	93	1
2	33	28	24	85	0
2	36	31	28	95	0
2	35	27	28	90	1
2	6	32	27	95	1
2	34	31	29	94	1
2	31	32	22	85	1
2	23	31	23	77	1
2	31	28	24	83	1
2	26	31	19	76	1
2	33	28	26	87	1
2	31	28	27	86	1
2	30	31	22	83	1
2	39	39	29	107	1
2	23	32	28	83	1
2	33	30	25	88	1
2	22	28	26	76	1
2	24	32	26	82	1
2	30	31	29	90	1
2	35	29	24	88	0
2	36	26	28	90	0
2	34	30	25	89	1
2	36	33	27	96	0
2	27	31	25	83	1

2	22	29	21	72	1
2	22	28	23	73	1
2	36	32	24	92	0
2	19	29	20	68	0
2	36	30	24	90	1
2	31	26	29	86	1
2	30	28	27	85	0
2	31	34	27	92	0
2	27	28	27	82	1
2	33	27	26	86	1
2	31	30	30	91	1
2	30	30	28	88	1
2	32	30	27	89	0
2	30	27	29	86	1
2	23	27	28	78	1
2	25	30	22	77	1
2	25	30	21	76	1
2	21	30	22	73	1
2	29	28	17	74	1
2	28	29	26	83	1
2	30	33	20	83	1
2	26	30	23	79	1
2	24	29	23	76	0
2	29	34	26	89	1
2	25	28	24	77	1
2	31	28	20	79	0
2	35	27	22	84	0
2	27	23	21	71	1
2	33	29	24	86	0
2	32	31	27	90	0
2	34	34	21	89	1
2	35	21	22	78	1
2	33	26	24	83	0
2	31	30	23	84	1
2	29	27	20	76	1
2	31	29	23	83	1
2	36	27	21	84	0
2	35	25	21	81	1
2	33	31	18	82	1
2	31	26	19	76	0
2	40	25	27	92	1

2	34	32	26	92	1
2	31	27	22	80	1
2	29	26	18	73	1
2	27	31	28	8	1
2	25	29	24	78	1
2	34	28	21	83	1
2	36	32	20	88	0
2	34	28	21	83	0
2	30	30	21	81	1
2	31	27	22	80	1
2	36	32	20	88	1
2	32	29	23	84	1
2	24	27	20	71	1
2	38	29	22	89	0
2	35	34	24	93	0
2	31	24	22	77	1
2	33	30	21	84	0
2	26	32	21	79	0
2	31	24	20	75	0
2	35	35	24	94	0
2	34	35	22	91	0
2	34	21	21	76	0
2	22	24	21	67	0
2	35	27	24	86	0
2	35	18	18	71	0
2	34	26	24	84	0
2	38	30	22	90	1
2	34	25	22	81	0
2	31	27	22	80	0
2	32	24	17	73	1
2	33	28	15	76	0
2	30	29	19	78	0
2	31	26	21	78	1
2	32	24	26	82	1
2	32	28	24	84	1
2	26	29	21	76	1
2	22	31	21	74	0
2	25	31	21	77	1
2	34	27	18	79	1
2	30	19	23	72	1
2	26	32	24	82	0

2	30	27	24	81	0
2	33	25	13	71	0
2	24	25	10	59	1
2	22	27	25	74	1
2	24	29	25	78	0
2	26	31	24	81	0
2	32	30	26	88	1
2	33	26	21	80	1
2	28	25	25	78	1
2	38	31	22	91	0
2	31	29	25	85	1
2	25	28	25	78	1
2	37	29	23	89	1
2	34	25	24	83	1
2	26	28	23	77	1
2	28	28	16	72	0
2	36	30	23	89	0
2	27	28	22	77	1
2	29	27	21	77	0
2	26	24	14	64	0
2	35	22	19	76	1
2	30	31	20	81	0
2	29	25	17	71	0
2	35	28	23	86	1
2	30	30	22	82	0
2	27	29	13	69	1
2	31	28	12	71	1
2	17	26	29	72	0
2	20	17	15	52	0
2	17	21	25	63	0
2	25	25	21	71	0
2	18	19	9	46	1
2	13	15	20	48	1
2	26	29	22	77	0
2	33	28	30	91	0
2	21	17	11	49	0
2	16	27	15	58	0
2	37	26	25	88	1
2	42	34	26	102	1
2	29	25	17	71	1
2	28	28	22	78	1

2	34	32	24	90	0
2	41	32	27	100	0
2	23	19	23	65	0
2	32	26	15	73	1
2	21	26	20	67	1
2	28	25	19	72	0
2	27	17	24	68	1
2	27	22	21	70	0
2	25	27	21	73	1
2	23	27	21	71	1
2	26	29	24	79	0
2	16	20	17	53	1
2	27	25	22	74	1
2	28	27	22	77	1
2	27	30	23	80	0
2	20	22	21	63	0
2	21	33	23	77	0
2	21	29	23	73	0
2	28	32	23	83	0
2	17	32	23	72	1
2	19	32	23	74	0
2	29	27	28	84	0
2	29	31	25	85	0
2	21	28	24	73	0
2	28	30	16	74	1
2	27	33	18	78	0
2	30	28	23	81	1
2	26	31	24	81	1
2	27	30	25	82	0
2	34	28	21	83	1
2	30	30	22	82	1
2	33	33	21	87	0
2	31	35	20	86	0
2	35	29	23	87	1
2	35	25	24	84	1
2	27	21	25	73	0
2	36	20	24	80	0
2	29	20	26	75	0
2	30	25	26	81	1
2	30	27	25	82	0
2	31	27	27	85	0

2	26	31	29	86	0
2	29	30	26	85	1
2	29	31	26	86	1
2	37	21	23	81	1
2	32	21	21	74	0
2	37	30	25	92	1
2	41	32	28	101	0
2	33	34	28	95	0
2	26	30	27	83	1
2	37	32	26	95	1
2	30	30	25	85	0
2	35	34	28	97	1
2	36	33	26	95	0
2	31	23	24	78	1
2	32	30	25	87	1
2	32	30	28	90	1
2	30	25	26	81	0
2	32	23	28	83	1
2	26	30	25	81	1
2	29	34	24	87	0
2	35	33	26	94	0
2	29	24	26	79	1
2	31	30	23	84	1
2	33	30	23	86	0
2	31	30	25	86	1
2	33	33	22	88	1
2	37	32	24	93	0
2	30	27	21	78	1
2	38	36	28	102	1
2	37	34	27	98	0
2	31	24	22	77	1
2	31	36	23	90	1
2	31	28	29	88	0
2	31	21	28	80	0
2	35	22	28	85	0
2	31	36	24	91	0
2	32	28	28	88	0
2	31	24	28	83	0
2	31	30	25	86	0
2	26	23	20	69	1
2	28	16	19	63	0

2	31	24	20	75	1
2	36	31	20	87	1
2	30	24	18	72	1
2	31	21	28	80	0
2	29	21	27	77	1
2	26	19	22	67	1
2	33	28	25	86	1
2	24	30	27	81	1
2	23	27	23	73	1
2	33	30	24	87	0
2	30	26	27	83	1
2	23	23	24	70	0
2	31	22	25	78	1
2	26	23	18	67	1
2	19	24	24	67	0
2	20	25	23	68	0
2	28	30	21	79	1
2	33	27	28	88	0
2	23	27	25	75	0
2	31	29	21	81	0
2	26	27	25	78	0
2	24	24	25	73	0
2	25	22	28	75	0
2	21	22	21	64	0
2	26	24	26	76	0
2	24	23	25	72	0
2	22	21	22	65	1
2	24	22	22	68	1
2	26	17	21	64	1
2	27	24	28	79	0
2	27	22	24	73	1
2	11	25	24	66	1
2	26	28	27	81	0
2	27	29	25	81	1
2	22	19	25	66	0
2	23	21	25	69	1
2	20	24	27	71	0
2	20	26	27	73	1
2	28	24	29	81	0
2	19	26	29	74	0
2	26	25	26	77	0

2	22	26	29	77	0
2	22	25	29	76	0
2	17	13	10	40	0
2	18	26	23	67	0
2	28	27	20	75	0
2	19	21	29	69	1
2	33	32	25	90	1
2	35	24	27	86	1
2	33	33	23	89	1
2	34	28	24	86	0
2	29	27	23	79	0
2	21	21	21	63	0
2	34	28	28	90	0
2	28	31	26	85	1
2	21	28	18	67	1
2	32	33	27	92	1
2	34	33	26	93	1
2	26	26	25	77	0
2	28	30	27	85	0
2	31	28	25	84	1
2	21	13	22	56	0
2	22	27	20	69	1
2	22	27	23	72	0
2	24	28	15	67	1
2	22	24	22	68	1
2	22	32	26	80	0
2	28	32	24	84	0
2	19	31	22	72	0
2	21	29	26	76	1
2	18	16	10	44	1
2	35	28	26	89	1
2	36	23	27	86	1
2	27	29	28	84	1
2	19	26	23	68	1
2	31	31	27	89	0
2	24	31	19	74	1
2	28	31	28	87	0
2	26	28	26	80	1
2	27	30	28	85	1
2	29	32	24	85	1
2	30	21	26	83	1

2	26	26	24	76	1
2	19	24	24	67	0
2	27	30	27	84	1
2	35	25	25	85	1
2	28	30	29	87	0
2	22	31	24	77	1
2	34	27	24	85	1
2	34	25	25	84	1
2	35	32	27	94	0
2	31	32	24	87	1
2	30	28	26	84	0
2	34	24	29	87	1
2	26	32	25	83	1
2	21	27	27	75	1
2	29	21	24	74	0
2	21	26	24	71	1
2	22	29	24	75	0
2	35	25	15	75	0
2	31	23	13	67	1
2	29	28	25	82	0
2	34	30	29	93	0
2	36	33	27	96	0
2	37	30	24	81	1
2	25	27	25	77	1
2	27	25	26	76	0
2	40	28	25	81	1
2	34	31	29	94	1
2	30	29	23	82	0
2	21	26	24	71	1
2	22	24	16	62	1
2	25	29	25	79	0
2	32	29	26	87	1
2	29	31	23	83	1
2	27	27	25	79	0
2	32	20	25	78	1
2	30	27	21	78	1
2	31	34	26	91	1
2	19	24	9	52	0
2	28	25	16	69	1
2	30	26	22	78	0
2	33	22	15	70	1

2	25	29	21	75	0
2	29	26	26	81	0
2	27	28	20	75	0
3	27	24	23	74	1
3	29	28	16	73	0
3	29	22	17	68	1
3	18	24	14	56	1
3	28	20	19	67	1
3	28	23	15	66	1
3	27	26	16	69	1
3	25	26	16	67	1
3	28	27	16	71	1
3	32	34	26	92	1
3	26	27	18	71	1
3	31	26	14	71	1
3	22	21	19	62	1
3	26	24	18	68	1
3	27	27	18	72	1
3	29	23	16	68	1
3	24	28	19	71	1
3	28	21	16	65	1
3	26	27	17	70	0
3	20	23	21	64	1
3	29	24	13	66	1
3	26	24	16	66	0
3	29	31	21	81	1
3	27	25	18	70	0
3	31	25	16	72	1
3	32	26	16	74	1
3	31	33	25	89	1
3	25	23	19	67	0
3	30	21	18	69	1
3	25	23	13	61	1
3	31	29	23	83	1
3	29	24	13	66	1
3	28	24	20	72	0
3	27	23	13	63	1
3	21	29	25	75	1
3	17	12	16	45	0
3	16	13	11	40	0
3	26	24	20	70	1

3	25	27	20	72	1
3	28	17	15	60	1
3	27	23	14	64	1
3	32	24	23	79	0
3	29	28	19	76	1
3	30	31	19	80	1
3	30	20	19	69	1
3	30	31	16	77	1
3	30	31	18	79	0
3	26	24	27	77	0
3	27	26	27	80	1
3	29	27	19	75	1
3	29	26	19	74	1
3	29	29	18	76	1
3	18	26	22	66	1
3	29	30	18	77	1
3	25	24	23	72	1
3	29	27	15	71	1
3	27	19	18	64	0
3	30	29	20	79	0
3	28	19	22	69	1
3	30	27	16	73	1
3	31	29	16	76	0
3	29	20	19	68	0
3	27	26	21	74	1
3	24	23	21	68	1
3	30	23	22	75	1
3	30	27	19	76	0
3	27	28	24	79	1
3	28	25	16	69	1
3	24	29	21	74	0
3	26	32	22	80	1
3	27	22	24	73	1
3	24	28	21	73	0
3	27	27	24	78	0
3	30	21	19	70	1
3	26	29	21	76	1
3	22	28	23	73	1
3	24	27	23	74	1
3	27	24	25	76	1
3	24	24	21	69	1



3	26	23	13	61	1
3	23	27	27	77	1
3	27	19	18	64	1
3	27	24	20	71	1
3	26	24	17	67	1
3	27	23	24	74	1
3	27	24	12	63	1
3	28	22	25	75	0
3	26	23	19	68	0
3	23	26	20	69	1
3	24	24	21	69	1
3	28	33	24	85	1
3	24	20	18	62	1
3	22	23	23	68	0
3	28	23	24	75	0
3	23	23	23	69	0
3	27	23	24	74	0
3	24	21	19	64	1
3	26	18	13	57	0
3	25	23	18	66	0
3	15	12	7	34	1
3	24	24	20	68	0
3	20	17	11	48	1
3	17	12	11	40	1
3	14	8	10	32	1
3	27	20	6	53	1
3	30	27	10	67	0
3	24	24	18	66	1
3	23	26	24	73	1
3	26	28	12	66	1
3	30	17	12	59	1
3	26	31	26	83	1
3	26	25	17	68	1
3	31	25	26	82	1
3	19	21	24	64	1
3	22	26	24	71	1
3	29	30	24	83	1
3	30	24	21	75	1
3	29	22	25	76	0
3	33	29	26	88	1
3	19	32	16	67	0

3	17	29	16	62	0
3	24	25	21	70	1
3	26	29	22	77	0
3	25	29	12	66	0
3	24	17	12	53	1
3	31	24	9	64	0
3	24	20	19	63	1
3	25	25	22	72	0
3	23	22	16	61	1
3	26	29	14	69	1
3	27	28	11	66	1
3	23	21	18	62	1
3	26	28	8	62	1
3	30	24	13	67	0
3	23	24	10	57	0
3	31	25	10	66	0
3	18	11	7	36	1
3	30	22	1	53	0
3	21	24	8	53	0
3	24	22	11	57	1
3	26	24	12	62	1
3	22	21	5	48	1
3	27	19	7	52	1
3	18	14	10	42	1
3	27	26	7	60	0
3	26	26	6	57	0
3	27	33	14	74	0
3	17	18	8	43	1
3	17	19	6	42	1
3	16	31	14	61	1
3	30	28	11	69	1
3	17	23	6	46	1
3	18	25	14	57	1
3	22	23	5	50	1
3	25	20	7	52	1
3	31	28	6	65	1
3	27	26	22	75	1
3	30	27	11	68	1
3	30	24	6	60	1
3	29	21	9	59	1
3	26	31	19	76	0

3	29	29	16	74	0
3	23	26	16	65	0
3	26	27	4	57	1
3	22	24	19	65	1
3	28	21	26	75	1
3	29	27	10	66	1
3	25	24	20	69	0
3	27	29	7	63	1
3	25	22	8	55	0
3	22	22	15	59	0
3	28	22	24	74	1
3	32	22	19	73	1
3	17	22	17	56	1
3	15	26	12	53	0
3	18	11	5	34	1
3	3	14	0	17	1
3	19	14	9	42	1
3	25	22	4	51	1
3	26	24	14	64	0
3	24	24	8	56	1
3	26	20	10	56	1
3	19	24	10	53	1
3	32	33	14	79	1
3	20	27	16	63	0
3	20	21	7	48	1
3	20	14	11	45	0
3	24	27	7	58	1
3	27	24	4	55	1
3	13	27	6	46	0
3	12	23	5	40	0
3	28	27	9	64	0
3	26	26	13	65	1
3	25	18	13	56	1
3	22	28	19	69	1
3	20	14	18	52	0
3	17	31	24	72	1
3	14	26	22	62	1
3	23	29	18	70	0
3	15	14	5	34	1
3	19	19	17	55	1
3	19	27	12	58	1

3	22	25	9	56	1
3	25	25	12	62	1
3	20	25	9	54	1
3	26	31	15	72	1
3	23	37	21	81	1
3	23	37	22	82	1
3	27	24	5	56	0
6	28	14	4	46	1
6	22	16	8	46	1
6	12	0	3	15	0
6	23	14	8	45	0
6	15	10	7	32	0
6	13	13	5	31	0
6	11	5	2	18	1
6	19	12	9	40	0
6	13	16	7	36	0
6	14	10	1	25	1
6	17	1	1	19	0
6	7	3	1	11	1
6	15	12	9	36	0
6	13	8	10	31	0
6	14	8	4	27	0
6	7	1	0	8	0
6	17	9	5	31	1
6	13	12	7	32	0
6	21	24	8	53	0
6	20	25	16	61	1
6	20	24	16	60	1
6	20	17	13	50	0
6	14	10	9	33	0
6	12	17	10	39	1
6	18	23	16	57	1
6	20	11	10	41	1
6	16	25	7	48	0
6	15	22	15	52	0
6	24	22	9	55	0
6	15	19	9	43	1
6	20	19	7	46	0
6	29	31	7	67	1
6	15	22	16	53	0
6	16	28	10	54	1

6	27	32	10	69	0
6	4	29	29	66	0
6	19	29	7	55	1
6	18	25	10	53	1
6	19	28	11	58	0
6	22	27	10	59	1
6	21	32	10	63	0
6	15	19	6	40	1
6	22	29	11	6	1
6	15	11	9	35	0
6	13	11	9	33	1
6	17	20	24	61	0
6	15	28	6	49	0
6	21	31	10	62	0
6	29	25	17	71	0
6	20	14	1	35	0
6	22	16	10	48	1
6	20	8	5	33	1
6	1	12	8	36	0
6	15	19	6	40	0
6	15	16	16	47	1
6	21	19	15	55	0
6	23	21	19	63	1
6	17	15	9	41	0
6	15	12	19	46	1
6	22	20	17	59	1
6	13	18	26	57	1
6	32	24	26	82	1
6	27	25	24	76	1
6	18	20	26	64	1
6	25	31	22	78	0
6	22	31	22	75	0
6	27	28	19	74	1
6	31	24	24	79	0
6	33	32	23	88	0
6	31	31	23	85	0
6	29	31	21	81	0
6	19	26	19	64	1
6	26	27	20	73	1
6	26	21	25	78	1
6	26	25	19	70	1

6	23	28	20	71	0
6	19	32	18	69	0
6	21	27	17	65	0
6	25	27	24	76	0
6	21	29	19	69	0
6	27	29	13	69	1
6	17	25	13	55	0
6	21	20	21	62	0
6	18	16	14	48	0
6	14	22	14	50	0
6	16	13	9	38	0
6	18	15	16	49	1
6	25	20	21	66	0
6	14	20	10	44	1
6	16	18	13	47	1
6	15	20	12	47	0
6	19	16	7	42	1
6	15	15	8	38	1
6	16	25	8	49	1
6	15	23	11	49	1
6	13	19	10	42	0
6	21	19	11	51	0
6	15	9	19	43	0
6	16	22	10	48	1
6	17	17	4	38	0
6	12	16	7	35	0
6	19	20	10	49	0
6	12	14	8	34	1
6	22	18	16	56	1
6	15	22	13	50	0
6	7	9	24	40	0
6	20	18	26	64	1
6	10	10	25	45	0
6	10	13	25	48	0
6	18	18	25	61	0
6	10	22	28	60	0
6	16	15	25	56	0
6	13	7	12	32	1
6	16	18	26	60	0
6	29	22	27	78	1
6	13	22	28	63	0

6	15	17	26	58	0
6	31	22	26	79	1
6	17	25	26	68	0
6	23	16	28	67	0
6	18	20	27	65	0
6	21	20	27	68	1
6	12	15	18	45	0
6	18	23	24	65	0
6	13	25	26	64	1
6	27	19	25	71	0
6	17	17	27	61	0
6	14	1	10	37	1
6	23	29	26	78	0
6	21	26	12	59	1
6	11	11	12	34	1
6	13	10	8	31	0
6	16	11	7	34	0
6	12	13	6	31	0
6	19	8	10	37	1
6	14	19	8	41	1
6	8	9	10	27	0
6	23	8	10	41	0
6	20	10	7	37	0
6	15	14	10	39	0
6	14	15	7	36	0
6	18	8	6	32	0
6	17	10	6	33	0
6	13	11	12	36	0
6	11	10	5	26	1
6	21	25	27	73	0
6	11	8	8	27	0
6	19	13	13	45	0
6	18	23	6	41	0
6	18	9	24	51	0
6	16	27	26	69	0
6	25	16	22	63	0
6	25	23	25	73	0
6	25	14	17	56	0
6	21	21	25	67	0
6	14	17	26	51	0
6	22	20	24	66	0

6	32	17	21	70	0
6	15	24	26	65	0
6	23	17	27	67	0
6	14	21	22	57	0
6	24	21	26	71	0
6	16	15	20	51	0
6	18	16	27	61	0
6	13	21	26	60	1
6	17	7	11	35	0
6	26	11	5	42	0
6	22	15	9	46	0
6	18	5	5	28	0
6	17	8	9	34	0
6	19	1	12	48	0
6	20	15	6	41	0
6	20	11	13	44	0
6	22	19	12	53	0
6	30	27	25	82	0
6	16	10	7	33	0
6	18	15	12	45	0
6	13	13	17	43	0
6	14	26	20	60	0
6	15	17	12	44	0
6	12	9	6	27	0
6	13	15	8	36	0
6	20	12	5	37	0
6	16	8	8	32	1
6	20	7	7	34	0
6	17	15	5	37	0
6	21	17	6	44	0
6	15	10	8	33	0
6	17	10	5	32	0
6	16	10	5	31	0
6	15	15	11	41	0
6	20	17	7	44	0
6	20	20	3	43	0
6	19	9	11	39	0
6	19	14	4	37	0
6	28	22	26	76	1
6	3	25	23	71	1
6	27	26	25	78	1

6	28	24	27	79	1
6	28	21	24	73	1
6	27	22	25	74	1
6	22	24	26	72	1
6	27	21	20	68	1
6	22	17	25	64	1
6	15	23	24	62	1
6	25	26	27	78	1
6	26	24	26	76	1
6	16	20	25	61	1
6	26	26	27	79	1
6	25	24	24	73	1
6	26	25	25	76	1
6	17	20	25	62	1
6	27	21	20	68	1
6	19	14	7	40	0
6	16	12	6	34	0
6	22	22	15	59	1
6	20	27	10	57	0
6	26	22	9	57	0
6	21	19	16	56	0
6	22	21	7	50	0
6	19	25	12	56	0
6	18	15	10	43	0
6	20	16	9	45	1
6	15	23	12	50	0
6	20	25	10	55	0
6	18	7	17	42	0
6	14	16	5	35	0
6	17	21	21	59	1
6	11	13	17	41	0
6	14	21	16	51	0
6	21	22	13	56	0
6	17	15	19	51	0
6	18	10	21	49	1
6	12	29	20	61	0
6	15	20	11	46	0
6	5	10	3	19	1
6	10	11	8	29	0
6	17	12	10	39	0
6	30	10	11	25	0

6	22	13	4	39	1
6	8	14	9	31	0
6	13	9	7	29	0
6	8	7	10	29	0
6	21	15	3	39	0
6	13	8	10	31	0
6	13	11	12	36	0
6	8	13	4	25	0
6	14	9	10	33	0
6	29	24	21	74	1
6	30	22	19	71	1
6	27	18	17	62	1
6	28	20	15	63	1
6	25	19	24	68	1
6	23	26	27	76	1
6	29	21	26	76	1
6	19	17	11	47	1
6	21	13	9	43	0
6	13	11	7	31	1
6	15	22	9	46	1
6	20	17	9	46	1
6	19	23	13	53	1
6	22	18	18	58	0
6	20	17	13	50	1
6	24	11	12	47	0
6	20	22	26	68	0
6	15	12	7	34	0
6	16	16	8	40	0
6	21	10	16	47	0
6	19	9	15	43	0
6	20	9	15	44	0
6	19	9	18	46	0
6	16	9	19	44	0
6	18	10	10	38	0
6	20	10	12	42	0
6	18	10	10	38	0
6	19	9	11	39	0
6	13	9	9	31	0
6	19	11	6	36	0
6	19	11	7	37	0
6	16	7	6	29	0

6	22	10	12	44	0
6	21	9	12	42	0
6	26	24	24	74	0
6	23	11	7	41	0
6	14	16	5	35	1
6	24	19	25	68	0
6	20	24	28	72	0
6	24	21	28	72	0
6	25	26	28	77	0
6	32	26	27	85	0
6	35	19	26	80	0
6	16	15	20	21	0
6	29	12	25	66	0
6	34	15	19	68	0
6	11	13	16	40	0
6	23	8	16	47	0
6	15	10	24	49	0
6	30	29	29	88	0
6	25	15	27	67	0
6	11	10	12	33	0
6	19	27	17	63	1
6	19	17	14	50	1
6	20	15	10	45	1
6	18	19	9	46	1
6	20	14	7	41	1
6	18	15	13	46	1
6	15	17	8	40	0
6	14	16	6	36	0
6	22	13	6	41	1
6	14	10	11	35	1
6	10	6	3	19	0
6	21	11	14	46	1
6	13	13	7	33	1
6	24	16	18	58	0
6	15	15	11	41	1
6	18	25	26	69	0
6	20	25	25	70	0
6	24	18	28	70	1
6	12	8	3	23	0
6	21	2	6	29	0
6	14	11	9	36	0

6	14	11	8	33	0
6	21	12	9	42	0
6	16	9	5	30	0
6	16	22	25	63	0
6	11	10	7	28	0
6	3	15	7	25	0
6	11	11	10	32	0
6	16	10	8	34	0
6	22	36	11	59	0
6	14	18	8	40	0
6	11	11	10	32	0
6	19	14	8	41	0
6	13	11	9	33	0
6	16	10	8	34	1
6	14	20	7	41	0
6	16	8	5	29	0
6	17	7	7	31	0
6	12	11	11	34	0
6	9	8	8	25	0
6	14	9	5	28	0
6	19	22	11	52	1
6	13	13	13	39	0
6	13	12	8	33	0
6	14	8	8	30	0
6	18	26	8	52	0
6	20	8	8	36	0
6	18	14	12	44	0
6	27	13	8	48	0
6	15	25	10	50	0
6	16	7	9	32	0
6	22	16	10	48	0
6	13	21	8	42	0
6	15	7	3	25	0
6	12	16	11	39	0
6	19	10	9	38	0
6	18	12	8	38	0
6	17	8	11	36	0
6	19	11	14	44	0
6	18	11	14	43	0
6	19	10	10	39	1
6	20	16	12	48	0

6	21	15	11	47	0
6	27	8	2	37	0
6	11	7	9	27	0
6	16	12	7	35	0
6	16	9	8	33	0
6	19	20	10	49	1
6	12	15	7	32	1
6	21	15	11	47	1
6	16	12	11	39	1
6	15	13	5	33	1
6	18	20	10	48	1
6	14	18	8	30	1
6	24	15	12	51	1
6	9	5	7	21	0
6	20	21	8	49	0
6	15	10	9	34	0
6	24	22	4	50	0
6	17	6	8	31	0
6	7	7	7	21	0
6	16	14	9	39	0
6	12	9	5	26	0
6	0	0	1	1	0
6	25	25	12	62	0
6	24	24	12	60	0
6	20	10	6	36	0
6	10	14	8	32	0
6	16	9	6	31	1
6	12	10	11	33	0
6	18	10	4	32	0
6	12	10	9	31	0
6	17	4	5	26	0
6	12	8	8	28	0
6	14	13	5	32	0
6	16	13	13	42	0
6	16	13	11	40	0
6	16	12	11	39	0
6	14	12	6	32	0
6	13	19	13	45	0
6	7	1	0	8	0
6	14	15	17	46	0
6	13	7	9	29	0

6	18	7	11	36	0
6	13	9	7	29	0
6	21	22	10	53	1
6	21	17	10	48	0
6	19	14	11	44	1
6	25	14	10	49	0
6	21	13	10	44	0
6	21	10	12	43	1
6	20	15	11	46	1
6	23	16	12	51	1
6	19	17	11	47	1
6	22	16	10	48	1
6	16	11	10	37	1
6	18	5	6	29	1
6	18	17	9	44	1
6	8	11	9	28	1
6	13	10	10	33	1
6	22	16	9	47	1
6	16	12	9	37	1
6	15	11	11	37	1
6	14	16	10	40	1
6	15	13	8	36	1
6	16	6	13	35	0
6	17	9	11	37	0
6	12	7	8	27	1
6	14	10	14	38	0
6	18	11	13	42	0
6	14	15	14	43	0
6	12	9	13	34	0
6	20	7	8	35	0
6	17	13	15	45	0
6	19	13	7	39	0
6	11	7	8	26	0
6	18	10	6	34	0
6	20	0	0	20	0
6	13	1	0	14	0
6	21	17	14	52	0
6	15	12	11	38	0
6	10	13	7	30	0
6	18	8	7	33	0
6	15	9	8	32	1

6	12	10	4	26	1
6	19	17	15	51	1
6	7	8	11	26	1
6	13	14	9	36	1
6	12	14	10	36	1
6	14	14	7	35	1
6	15	9	9	33	0
6	12	10	8	30	0
6	17	11	10	38	0
6	19	22	7	48	0
6	15	17	18	50	0
6	15	20	20	55	0
6	15	14	10	39	0
6	10	18	20	48	0
6	11	27	8	46	0
6	17	16	4	37	0
6	18	11	23	52	0
6	6	1	7	14	0
6	13	11	15	39	0
6	14	15	12	41	0
6	20	18	12	50	0
6	9	13	16	38	0
6	12	11	11	34	0
6	18	12	10	40	0
6	10	10	9	29	0
6	14	17	9	40	0
6	21	19	13	53	0
6	12	11	6	29	0
6	16	17	13	46	0
6	4	22	10	46	1
6	16	12	19	38	0
6	22	12	10	44	0
6	23	12	12	47	0
6	16	19	12	47	0
6	16	18	11	45	0
6	21	12	13	46	0
6	19	13	16	48	0
6	22	10	7	39	0
6	22	13	11	46	1
6	21	15	13	49	0
6	25	19	15	59	1

6	20	15	13	48	0
6	22	17	14	53	0
6	19	17	9	45	0
6	16	11	17	44	0
6	23	20	10	53	0
6	20	23	19	62	0
6	11	31	21	73	0
6	7	12	20	52	0
6	13	12	9	34	0
6	13	11	7	31	0
6	8	30	20	68	0
6	7	25	9	41	0
6	14	17	21	52	0
6	14	33	23	70	0
6	13	11	8	32	0
6	13	13	7	33	0
6	20	10	6	36	0
6	17	11	7	35	0
6	16	7	9	32	0
6	19	12	8	39	0
6	9	9	7	25	0
6	1	0	0	1	0
6	7	14	7	38	0
6	18	15	5	38	0
6	17	12	6	35	0
6	28	11	14	53	0
6	14	7	2	23	1
6	19	11	5	35	1
6	15	13	8	36	0
6	13	12	9	34	0
6	8	7	6	21	1
6	0	0	0	0	0
6	28	10	3	41	1
6	31	12	15	58	0
6	27	17	11	55	1
6	24	7	27	58	1
6	11	26	24	61	1
6	19	16	22	57	1
6	14	15	5	34	1
6	27	20	25	72	0
8	4	12	9	25	0



8	18	13	8	39	1
8	10	3	12	25	0
8	22	21	14	57	0
8	24	21	13	58	1
8	20	13	13	46	1
8	15	10	11	36	1
8	12	11	6	29	0
8	13	22	11	46	0
8	20	12	7	39	0
8	19	19	8	46	1
8	20	22	10	52	1
8	19	21	10	50	0
8	14	9	8	31	0
8	17	8	7	32	1
8	18	14	4	36	0
8	17	10	7	34	1
8	11	10	4	25	0
8	16	8	8	32	0
8	13	7	3	23	0
8	11	13	7	31	1
8	1	5	2	26	1
8	11	10	10	31	0
8	18	9	11	38	1
8	20	24	20	64	1
8	25	19	21	65	0
8	26	26	19	71	1
8	21	26	28	75	0
8	22	22	20	64	1
8	13	17	21	51	0
8	23	17	22	62	1
8	25	18	2	63	1
8	20	21	26	67	0
8	20	15	24	59	1
8	21	28	21	70	1
8	23	16	21	60	0
8	22	13	17	52	0
8	11	27	19	57	1
8	12	13	10	35	1
8	18	24	14	56	0
8	25	25	20	70	0
8	19	25	28	72	1

8	26	27	25	78	0
8	26	24	25	75	1
8	29	16	1	63	0
8	17	29	27	73	0
8	26	14	20	60	1
8	23	23	17	63	1
8	24	19	19	62	1
8	23	19	17	59	0
8	27	23	19	69	1
8	17	17	14	48	0
8	29	22	21	72	1
8	23	18	21	62	1
8	20	28	17	65	0
8	26	13	20	59	1
8	25	13	20	58	0
8	19	20	11	50	0
8	25	17	23	65	0
8	23	26	22	71	1
8	21	22	24	67	1
8	28	27	24	79	1
8	24	18	22	64	1
8	28	26	24	78	0
8	24	13	18	55	1
8	24	28	24	76	0
8	23	21	13	57	0
8	40	31	15	86	0
8	26	28	25	79	0
8	21	25	19	65	1
8	25	18	17	60	1
8	23	27	20	70	1
8	24	26	26	76	0
8	26	28	12	66	0
8	26	25	12	63	1
8	26	28	11	65	0
8	19	17	11	47	1
8	25	24	20	69	0
8	26	22	21	69	0
8	22	23	12	57	0
8	26	27	11	64	1
8	24	24	12	60	1
8	26	27	12	65	0

8	17	16	11	44	1
8	19	16	21	56	1
8	25	26	20	71	0
8	23	23	22	68	1
8	25	23	12	60	0
8	19	18	11	48	0
8	25	23	14	62	0
8	23	18	12	53	1
8	19	15	12	46	1
8	18	14	11	43	0
8	24	13	12	49	1
8	19	15	22	56	1
8	23	18	11	52	1
8	25	19	11	55	0
8	24	18	11	53	1
8	25	19	11	55	1
8	20	16	12	48	1
8	22	16	12	50	0
8	21	16	12	49	0
8	21	17	12	50	1
8	25	22	10	57	0
8	20	16	11	47	0
8	23	14	12	49	0
8	22	15	5	42	1
8	12	16	15	43	0
8	20	3	10	53	0
8	19	16	9	44	1
8	21	22	11	54	0
8	24	13	14	51	1
8	16	24	19	54	1
8	24	18	9	51	1
8	25	22	15	62	1
8	19	24	8	51	1
8	19	23	8	50	1
8	22	24	9	55	1
8	23	23	10	56	1
8	18	27	10	55	1
8	21	25	9	55	1
8	15	22	9	46	0
8	18	18	10	46	1
8	20	18	14	52	0

8	16	16	9	41	0
8	16	12	13	41	1
8	16	10	10	36	1
8	13	17	11	41	0
8	20	15	9	44	1
8	25	24	10	59	1
8	24	25	14	63	1
8	15	15	8	38	0
8	18	21	10	49	0
8	25	23	13	61	0
8	16	26	15	57	0
8	23	25	16	64	0
8	24	21	14	59	0
8	19	17	18	54	0
8	14	14	11	39	1
8	25	24	23	72	1
8	27	23	22	72	1
8	25	21	20	66	1
8	17	12	13	42	1
8	23	23	16	62	1
8	16	21	16	53	1
8	14	11	8	33	0
8	14	8	8	30	0
8	19	11	11	41	1
8	27	23	13	63	0
8	20	14	5	39	0
8	20	25	15	60	0
8	19	12	14	45	1
8	20	20	10	50	0
8	17	4	8	29	1
8	17	12	7	36	0
8	25	21	6	52	1
8	16	21	10	47	0
8	14	18	11	43	1
8	19	18	9	46	1
8	13	8	11	32	0
8	20	21	15	56	1
8	21	21	13	55	0
8	20	15	18	53	0
8	23	25	12	60	1
8	23	21	15	59	1

8	21	18	8	47	1
8	24	20	14	58	0
8	24	14	17	55	1
8	22	10	10	42	0
8	19	18	10	47	0
8	19	21	15	55	0
8	20	17	10	47	1
8	21	24	15	60	1
8	20	9	10	39	1
8	24	24	15	63	1
8	25	21	17	63	0
8	21	26	16	63	0
8	21	19	8	48	0
8	20	16	9	45	0
8	21	24	19	64	0
8	18	15	8	41	0
8	21	29	20	70	0
8	15	21	11	47	0
8	18	14	11	43	1
8	28	26	21	75	0
8	22	31	20	73	0
8	24	30	21	75	0
8	21	27	21	69	0
8	21	26	18	65	0
8	23	20	9	52	1
8	19	9	14	42	1
8	20	21	10	51	0
8	18	21	12	51	0
8	14	17	17	48	1
8	17	13	11	41	0
8	17	17	12	46	1
8	19	10	10	39	1
8	20	20	11	51	0
8	20	13	9	42	0
8	19	17	13	49	0
8	22	23	13	58	0
8	20	11	14	45	0
8	18	18	13	49	0
8	24	24	11	59	0
8	19	14	14	47	0
8	14	9	5	28	0

8	22	23	13	58	0
8	21	17	10	48	1
8	23	13	10	46	1
8	20	12	12	44	0
8	33	25	11	69	1
8	32	25	17	74	0
8	15	11	11	37	1
8	22	14	17	53	1
8	20	16	15	51	1
8	26	18	11	55	0
8	19	12	15	46	1
8	12	15	10	37	1
8	22	17	17	56	1
8	20	17	13	50	0
8	23	18	18	59	1
8	24	20	18	62	1
8	25	16	11	52	1
8	19	14	13	46	0
8	23	14	12	49	0
8	23	20	11	54	1
8	22	23	10	55	1
8	16	11	6	33	1
8	17	16	8	41	1
8	26	15	5	46	1
8	24	14	10	48	1
8	12	14	9	35	1
8	10	15	10	35	0
8	21	20	7	48	1
8	20	9	5	34	1
8	22	10	11	43	1
8	14	14	7	35	1
8	15	15	10	40	0
8	16	15	11	42	0
8	16	18	3	37	1
8	15	14	6	35	1
8	13	14	4	31	1
8	14	19	5	38	0
8	13	15	4	32	1
8	16	10	8	34	0
8	19	18	8	45	1
8	13	11	3	27	1

8	23	22	16	61	0
8	14	6	8	28	0
8	14	8	9	31	0
8	13	14	5	32	1
8	17	18	10	45	1
8	21	19	9	49	0
8	21	19	15	55	0
8	14	12	1	27	1
8	19	12	12	43	1
8	19	16	7	42	1
8	22	21	12	55	1
8	24	17	12	53	1
8	11	14	6	31	1
8	20	20	7	47	0
8	15	20	7	42	0
8	17	14	7	38	0
8	16	17	12	45	0
8	12	19	2	33	1
8	14	28	4	46	0
8	20	17	7	44	1
8	21	11	8	40	1
8	19	19	6	44	1
8	23	16	7	46	0
8	21	24	5	50	0
8	24	17	14	55	1
8	22	19	10	51	0
8	23	20	8	51	1
8	20	16	11	47	1
8	18	7	2	27	1
8	14	17	5	36	0
8	18	13	4	35	1
8	18	13	9	40	0
8	25	16	9	50	0
8	16	14	9	39	0
8	15	14	12	41	1
8	22	12	10	44	1
8	20	29	13	62	0
8	21	18	4	43	0
8	22	18	7	47	0
8	24	18	14	56	1
8	23	19	13	55	1

8	22	15	24	61	0
8	22	14	23	59	1
8	19	19	16	54	1
8	22	19	5	46	0
8	22	20	14	56	1
8	18	15	14	47	0
8	10	8	8	26	0
8	19	13	9	41	0
8	13	20	12	45	0
8	27	22	18	67	0
8	23	24	17	64	0
8	21	30	18	69	1
8	16	20	14	50	0
8	26	20	13	59	0
8	20	16	19	55	1
8	24	23	13	60	1
8	31	22	21	74	0
8	29	28	18	75	0
8	33	26	20	79	0
8	28	22	18	68	0
8	34	30	20	84	0
8	24	26	20	70	1
8	25	21	16	62	0
8	23		18	58	0
8	24	24	16	64	1
8	20	17	22	59	0
8	25	22	18	65	1
8	26	28	22	76	1
8	27	19	17	63	1
8	24	23	19	66	1
8	27	29	11	67	1
8	23	29	16	68	1
8	28	30	17	75	1
8	30	30	13	73	1
8	27		13	68	1
8	14	12	4	30	0
8	23	25	10	58	1
8	22	20	12	54	1
8	22	19	13	54	1
8	23	24	10	57	0
8	11		18	53	1

8	22	18	15	55	0
8	19	18	16	53	1
8	22	21	19	62	1
8	22	23	15	60	0
8	22	11	11	44	0
8	15	20	5	40	0
8	23	21	13	57	1
8	28	26	18	72	1
8	28	28	14	70	0
8	20	20	14	54	0
8	21	20	11	52	1
8	32	24	20	76	1
8	23	28	15	66	1
8	30	26	8	64	0
8	28	26	10	64	0
8	17	13	19	49	0
8	17	15	19	51	0
8	24	26	10	60	0
8	23	16	12	51	1
8	20	22	11	53	0
8	14	19	8	41	0
8	16	14	12	42	0
8	22	21	14	57	0
8	21	18	13	52	1
8	32	24	20	76	1
8	16	20	13	49	0
8	24	20	9	53	1
8	29	20	13	62	1
8	30	20	17	67	0
8	21	22	19	62	0
8	30	26	19	75	0
8	26	20	22	68	0
8	23	19	22	64	0
8	22	25	9	56	1
8	22	26	17	65	1
8	24	24	22	70	1
8	24	20	23	67	1
8	22	19	14	55	0
8	19	10	8	37	1
8	27	20	22	69	0
8	24	17	18	59	0

8	28	24	25	77	0
8	24	33	8	65	1
8	25	23	22	70	1
8	27	23	13	63	1
8	26	23	17	66	1
8	25	26	16	67	0
8	24	13	15	52	1
8	20	22	24	66	0
8	25	25	19	69	0
8	23	25	10	58	1
8	19	25	18	62	1
8	22	26	19	67	1
8	21	26	20	67	0
8	29	29	17	75	1
8	21	24	16	61	1
8	21	26	9	56	1
8	24	23	23	70	0
8	21	24	12	57	1
8	22	19	16	57	0
8	25	27	23	75	0
8	22	24	11	57	1
8	28	31	18	77	1
8	27	26	11	64	1
8	26	25	23	74	0
8	24	26	22	72	0
8	22	26	18	66	0
8	23	20	16	59	0
8	23	23	21	67	1
8	21	27	14	62	1
8	26	27	20	73	1
8	27	21	17	65	1
8	23	25	20	68	1
8	25	22	23	70	1
8	23	23	20	66	1
8	27	24	19	70	0
8	22	24	23	69	1
8	23	23	21	67	1
8	21	24	9	54	1
8	17	19	18	54	0
8	25	20	22	67	0
8	21	24	19	64	1

8	25	27	20	72	0
8	24	25	23	72	1
8	20	18	9	47	1
8	25	25	4	54	0
8	24	23	12	59	1
8	24	25	11	60	0
8	23	23	13	59	1
8	25	24	21	70	1
8	23	22	21	66	1
8	21	23	21	65	1
8	24	24	15	63	1
8	20	14	15	49	1
8	20	14	13	47	1
8	16	14	10	40	1
8	17	12	10	39	1
8	17	11	9	37	1
8	16	14	10	40	1
8	15	21	7	43	1
8	18	15	8	41	1
8	17	19	8	44	1
8	16	19	11	46	1
8	20	28	20	68	1
8	20	17	13	50	0
8	23	17	14	54	1
8	17	19	18	54	0
8	18	18	11	47	1
8	18	22	16	56	1
8	15	21	19	55	0
8	24	22	25	71	0
8	21	13	24	58	0
8	17	22	10	49	0
8	19	16	15	50	0
8	22	18	17	57	0
8	18	20	23	61	0
8	15	15	11	41	0
8	17	19	9	45	0
8	26	20	10	56	0
8	15	20	9	44	0
8	16	19	14	49	0
8	21	20	25	66	0
8	24	19	26	69	0

8	19	18	11	48	0
8	18	19	14	51	0
8	22	13	22	57	0
8	16	23	26	65	0
8	12	9	11	32	0
8	20	22	11	53	0
8	26	24	20	70	0
8	21	16	22	59	1
8	20	22	13	55	1
8	23	27	12	62	1
8	19	17	16	52	0
8	20	23	12	55	0
8	21	19	6	46	0
8	14	30	21	65	0
8	20	22	14	56	1
8	23	30	20	73	0
8	20	22	7	49	0
8	15	13	22	50	1
8	19	20	13	52	0
8	23	14	23	60	1
8	19	17	16	52	1
8	15	15	14	44	1
8	20	22	15	57	1
8	21	27	12	60	1
8	24	22	22	68	1
8	22	18	18	58	0
8	20	14	14	48	1
8	16	23	16	55	0
8	21	18	9	48	0
8	24	20	14	58	0
8	22	16	14	52	1
8	22	25	18	65	0
8	21	22	17	60	0
8	21	30	22	73	0
8	20	30	9	59	0
8	21	17	22	60	1
8	21	24	18	63	1
8	17	21	24	62	1
8	21	26	21	68	0
8	19	16	19	54	1
8	18	13	19	50	1

8	21	20	14	55	0
8	20	13	19	52	0
8	14	13	21	48	0
8	18	11	19	48	0
8	25	15	23	63	0
8	23	11	7	41	1
8	10	16	5	31	1
8	22	9	5	36	0
8	13	11	5	29	0
8	19	14	9	42	1
8	8	2	6	16	0
8	26	28	19	73	0
8	13	10	11	34	1
8	17	4	9	30	0
8	21	16	10	47	0
8	14	20	9	43	1
8	12	8	6	26	0
8	15	9	7	31	0
8	29	7	10	46	1
8	16	24	14	54	0
8	17	10	4	31	1
8	11	21	6	38	0
8	24	19	18	61	0
8	10	16	7	33	0
8	14	20	12	46	1
8	22	23	19	64	0
8	30	20	22	72	0
8	25	21	20	66	0
8	24	26	22	72	1
8	31	29	18	78	1
8	15	14	18	47	1
8	13	16	19	48	1
8	14	10	4	28	0
8	27	20	20	67	1
8	23	24	19	66	0
8	18	20	20	58	0
8	25	27	25	77	0
8	25	22	21	68	1
8	25	22	22	69	1
8	26	22	23	71	1
8	31	22	24	77	0

8	28	27	25	80	1
8	29	24	26	79	1
8	26	23	23	72	1
8	26	29	24	79	1
8	29	26	24	79	0
8	24	27	20	71	0
8	26	23	23	72	0
8	20	23	16	59	0
8	28	24	25	77	1
8	27	23	21	71	0
8	28	32	24	84	0
8	28	19	19	66	0
8	26	26	27	79	0
8	27	20	26	73	1
8	28	23	26	77	0
8	25	23	25	73	1
8	28	27	25	80	1
8	23	19	13	55	1
8	25	25	22	72	1
8	21	20	16	57	1
8	25	21	21	67	0
8	26	35	24	85	0
8	33	24	25	82	0
8	30	21	23	74	1
8	26	20	27	73	1
8	35	28	25	88	0
8	30	18	19	67	0
8	33	20	21	74	0
8	32	22	21	75	0
8	20	24	18	62	0
8	30	30	23	83	0
8	21	23	19	63	0
8	32	23	14	69	1
8	28	23	17	68	1
8	22	9	23	54	1
8	19	16	11	46	0
8	11	16	10	37	1
8	21	9	22	52	1
8	32	27	21	80	1
8	24	25	17	66	0
8	23	11	17	51	1

8	20	7	5	32	0
8	16	16	8	40	0
8	15	12	8	35	0
8	21	22	7	50	0
8	15	11	4	30	1
8	14	6	11	31	1
8	8	6	2	16	0
8	14	10	7	31	1
8	18	10	11	39	1
8	14	7	8	29	0
8	16	8	5	29	0
8	13	8	1	22	0
8	12	6	10	28	0
8	18	13	8	39	1
8	17	9	19	45	1
8	17	9	12	38	0
8	14	14	11	39	0
8	13	11	9	33	0
8	24	9	4	37	1
8	14	11	7	32	1
8	10	14	10	34	0
8	10	9	4	23	1
8	13	10	11	34	0
8	19	13	13	45	0
8	18	16	14	48	0
8	18	12	13	43	0
8	16	15	10	41	0
8	22	12	14	48	0
8	22	15	13	50	1
8	29	18	7	54	0
8	21	15	8	44	1
8	22	17	13	52	1
8	24	19	8	51	1
8	18	19	10	47	1
8	21	14	11	46	1
8	13	15	10	38	1
8	26	22	10	58	0
8	26	22	10	58	0
8	16	9	9	34	1
8	21	25	12	58	0
8	20	17	10	47	0

8	26	19	9	54	0
8	21	13	8	42	0
8	15	15	8	38	0
8	22	19	4	45	1
8	15	18	7	40	0
8	17	14	8	39	0
8	21	18	12	51	0
8	16	13	9	38	0
8	22	13	8	43	0
8	24	14	8	46	0
8	19	19	11	49	0
8	29	16	9	54	0
8	15	12	10	37	0
8	12	15	8	35	0
8	20	19	10	49	0
8	23	20	9	52	0
8	22	16	13	51	0
8	25	19	21	65	0
8	9	22	8	39	1
8	20	20	19	59	0
8	26	16	17	59	1
8	24	26	18	68	1
8	18	24	20	62	0
8	22	20	22	64	0
8	23	26	16	65	1
8	13	24	20	57	1
8	17	24	19	60	1
8	20	19	19	58	1
8	22	25	18	65	1
8	23	22	20	65	0
8	24	22	19	65	0
8	25	16	18	59	0
8	27	15	17	59	0
8	18	24	7	49	0
8	15	14	9	38	1
8	15	12	12	39	1
8	25	14	13	52	1
8	23	24	12	59	0
8	21	23	9	53	1
8	24	20	4	48	0
8	21	26	15	62	1



8	22	21	16	59	0
8	22	19	20	61	0
8	26	19	20	65	0
8	23	22	16	61	0
8	25	25	15	65	0
8	18	22	22	62	1
8	22	17	23	62	0
8	19	17	23	59	0
8	26	24	14	64	0
8	23	22	15	60	0
8	23	16	23	62	0
8	20	17	20	57	0
8	21	26	16	63	0
8	23	21	17	61	1
8	19	20	18	57	0
8	18	21	21	60	0
8	29	25	17	71	1
8	26	22	18	66	0
8	22	25	19	66	1
8	25	26	11	62	1
8	17	15	19	51	1
8	29	29	19	77	0
8	23	21	18	62	0
8	28	18	23	69	0
8	22	17	19	58	0
8	27	28	21	76	1
8	18	15	23	56	1
8	21	17	19	57	0
8	19	19	19	57	0
8	17	11	8	36	1
8	18	20	10	48	0
8	22	18	13	53	1
8	12	14	13	39	1
8	19	31	19	69	0
8	16	18	12	46	1
8	21	19	22	62	1
8	18	20	15	53	1
8	25	22	24	71	1
8	18	5	5	28	0
8	15	26	20	61	0
8	24	12	18	54	0

8	20	19	22	61	0
8	24	22	14	60	0
8	13	18	22	53	0
8	31	26	15	72	1
8	25	26	15	66	1
8	12	21	12	45	0
8	17	18	25	60	0
8	31	22	21	74	1
8	31	25	8	64	1
8	19	18	13	50	1
8	26	17	25	68	1
8	24	20	24	68	1
8	21	20	18	59	1
8	25	20	24	69	0
8	23	18	22	63	1
8	21	17	20	58	1
8	19	20	18	57	1
8	23	23	22	68	1
8	25	20	24	69	0
8	19	16	18	53	1
8	23	15	22	60	1
8	24	22	17	63	1
8	24	10	24	58	0
8	17	19	24	60	0
8	25	17	22	64	1
8	27	29	21	77	0
8	29	22	21	72	1
8	21	25	26	72	0
8	30	23	24	77	0
8	26	21	17	64	1
8	26	23	17	66	1
8	38	27	25	90	0
8	32	25	22	79	0
8	34	30	25	89	0
8	29	21	25	75	0
8	15	15	22	52	0
8	16	8	22	46	1
8	21	22	20	63	1
8	21	16	24	61	0
8	21	22	25	68	0
8	36	19	21	76	0

8	30	30	24	84	0
8	28	27	25	80	0
8	30	31	25	86	1
8	31	25	23	79	0
8	26	20	23	69	0
8	32	26	22	80	1
8	33	27	21	81	1
8	34	23	21	78	0
8	34	25	26	85	1
8	31	21	24	76	1
8	30	28	20	78	0
8	30	19	17	66	0
8	33	21	26	80	1
8	35	23	24	82	0
8	34	27	24	85	0
8	25	28	23	76	0
8	19	18	23	60	1
8	22	19	24	65	1
8	30	25	22	77	0
8	20	16	12	48	0
8	14	13	6	33	0
8	25	24	18	67	0
8	13	7	3	23	1
8	26	27	24	77	1
8	17	25	6	48	1
8	30	26	19	75	0
8	34	30	20	84	0
8	34	28	22	84	1
8	32	12	13	57	1
8	29	20	23	72	1
8	31	29	20	80	0
8	22	22	25	69	0
8	35	23	23	81	0
8	25	23	19	67	1
8	17	4	4	25	1
8	9	9	12	30	1
8	31	26	20	77	1
8	31	28	22	81	1
8	11	12	8	31	1
8	26	16	15	57	1
8	30	17	18	65	1

8	26	22	13	61	1
8	31	27	18	76	1
8	33	27	9	69	0
8	26	28	23	77	1
8	32	24	15	71	1
8	30	27	24	81	0
8	26	23	27	76	0
8	25	26	25	76	1
8	21	19	22	62	0
8	21	24	23	68	1
8	22	20	27	69	0
8	27	29	20	76	1
8	24	20	26	70	0
8	29	19	22	70	0
8	35	28	21	84	0
8	24	23	24	71	1
8	30	21	22	73	1
8	29	26	28	83	0
8	32	27	23	82	1
8	29	21	25	75	1
8	26	30	20	76	1
8	34	25	20	79	1
8	33	27	18	78	1
8	29	22	28	79	1
8	34	28	22	84	0
8	32	14	22	68	0
8	33	26	21	80	0
8	20	25	18	63	0
8	19	10	27	56	0
8	25	26	18	69	0
8	19	24	18	61	0
8	24	23	23	70	0
8	20	26	20	66	0
8	19	20	19	58	0
8	17	24	16	57	0
8	19	23	17	59	0
8	34	26	14	74	0
8	19	21	7	47	0
8	32	16	16	64	0
8	26	26	10	62	0
8	18	26	17	61	1

8	22	18	13	53	0
8	18	23	17	58	0
8	22	22	18	62	0
8	26	20	15	61	0
8	23	20	16	59	0
8	24	25	17	66	1
8	24	24	15	63	0
8	17	22	22	61	1
8	15	14	11	40	1
8	21	19	17	57	1
8	23	11	21	55	1
8	20	23	13	56	0
8	25	22	18	65	0
8	28	23	19	70	0
8	27	10	24	61	0
8	24	23	21	68	0
8	26	20	22	68	0
8	26	13	15	54	1
8	22	10	17	49	1
8	25	6	17	48	1
8	18	17	22	57	1
8	22	19	16	57	1
8	25	16	20	61	0
8	27	22	27	76	0
8	10	20	11	41	0
8	14	15	9	38	0
8	17	22	16	55	0
8	14	11	8	33	0
8	14	8	5	27	0
8	19	7	11	37	0
8	16	6	8	30	1
8	19	12	8	39	0
8	18	18	14	50	1
8	13	10	11	34	1
8	14	6	18	38	0
8	15	10	11	36	1
8	17	19	12	48	0
8	19	19	18	56	0
8	19	14	11	44	1
8	18	11	8	37	1
8	14	21	9	44	1

8	30	21	11	62	1
8	15	13	4	32	0
8	28	25	7	60	1
8	23	21	21	65	0
8	30	22	20	72	1
8	29	22	22	73	1
8	22	26	23	71	1
8	20	23	23	66	0
8	26	22	24	72	1
8	20	20	24	64	1
8	23	27	15	65	0
8	22	27	17	66	0
8	22	25	24	71	1
8	26	24	15	65	0
8	21	24	15	60	0
8	22	30	4	56	0
8	24	10	9	43	0
8	28	20	25	73	0
8	29	19	22	70	0
8	24	16	21	61	0
8	18	15	9	42	1
8	21	27	14	62	1
8	24	25	22	71	0
8	23	18	21	62	1
8	28	21	15	64	1
8	26	19	15	60	1
8	28	16	17	61	1
8	22	20	22	64	1
8	28	21	23	72	1
8	29	17	23	69	1
8	24	21	22	67	1
8	26	20	20	66	1
8	29	25	24	78	1
8	28	21	13	62	1
8	21	21	22	64	1
8	28	15	16	59	0
8	25	17	22	64	1
8	23	17	23	63	1
8	20	21	11	52	1
8	27	21	22	70	1
8	19	18	24	61	1

8	21	14	23	58	1
8	21	23	10	54	0
8	25	23	17	65	0
8	28	25	14	67	0
8	25	25	12	62	0
8	21	27	17	65	0
8	25	28	14	67	1
8	30	30	22	82	0
8	24	24	17	65	0
8	22	24	14	60	1
8	27	31	13	71	1
8	25	24	15	64	1
8	27	31	15	73	1
8	26	29	12	67	0
8	21	30	5	56	1
8	23	30	2	55	1
8	24	23	16	63	0
8	28	28	2	58	1
8	30	27	15	72	0
8	23	30	8	61	1
8	23	30	11	64	1
8	25	30	10	65	1
8	27	24	21	72	0
12	34	29	22	85	1
12	26	28	15	9	0
12	36	25	23	84	1
12	31	28	20	79	0
12	25	22	8	55	0
12	29	32	27	88	1
12	34	24	20	78	1
12	33	33	24	90	1
12	28	28	23	79	1
12	23	28	16	77	1
12	30	28	10	68	1
12	29	28	20	77	0
12	28	30	20	78	0
12	24	24	21	69	1
12	23	25	19	67	1
12	21	24	20	65	1
12	17	26	8	51	0
12	17	19	16	52	1

12	27	21	19	67	1
12	26	21	18	65	1
12	33	31	21	85	1
12	35	8	19	82	1
12	3	24	15	61	1
12	21	28	13	62	1
12	22	21	14	57	1
12	20	19	20	59	1
12	22	23	16	61	0
12	23	19	7	49	0
12	4	29	29	87	1
12	26	26	23	75	1
12	24	18	7	49	0
12	35	19	15	69	1
12	28	25	19	72	1
12	31	27	17	75	1
12	24	26	10	60	0
12	25	27	15	67	0
12	33	33	18	84	1
12	2	30	18	73	1
12	24	29	30	83	1
12	33	33	23	89	0
12	28	17	8	53	0
12	23	9	9	41	0
12	18	10	8	36	1
12	26	19	8	53	0
12	23	22	8	53	1
12	18	23	8	49	0
12	17	22	8	47	1
12	28	30	14	72	1
12	19	26	11	56	0
12	16	10	8	34	0
13	31	23	24	78	0
13	30	22	15	67	0
13	32	22	21	75	0
13	26	22	13	61	0
13	27	24	22	73	1
13	24	24	25	73	1
13	25	23	22	70	0
13	27	26	21	74	1
13	32	21	17	70	1

13	14	13	8	35	0
13	14	16	6	36	1
13	20	23	26	69	1
13	32	25	24	81	1
13	20	21	23	64	0
13	17	14	22	53	1
14	32	25	21	78	0
14	32	24	21	77	0
14	34	25	24	83	1
14	22	30	23	75	0
14	25	22	28	75	1
14	27	27	27	81	0
14	26	29	23	78	1
14	26	29	21	76	0
14	28	31	23	82	0
14	27	32	24	83	0
14	24	22	27	73	0
14	27	24	26	77	0
14	27	32	21	80	0
14	28	32	24	84	0
14	28	32	24	84	0
14	25	31	25	81	0
14	31	26	21	78	0
14	31	20	20	71	0
14	29	32	24	85	0
14	30	29	22	81	0
14	28	21	23	72	0
14	32	29	26	87	0
14	34	28	26	88	0
14	33	30	26	89	0
14	29	32	26	87	0
14	29	31	25	85	0
14	21	26	28	75	1
14	23	27	14	64	1
14	32	24	20	76	1
14	23	24	23	70	1
14	23	23	23	69	1
14	20	25	27	72	0
14	30	21	22	73	0
14	34	22	28	84	0
14	13	24	22	59	1

14	11	25	23	59	0
14	13	28	23	64	0
14	22	26	25	73	0
14	23	25	20	68	0
14	21	25	26	72	0
14	23	20	19	62	1
14	23	23	22	68	0
14	31	22	22	75	0
14	23	30	27	80	0
14	28	28	19	75	0
14	24	25	28	77	0
14	23	22	27	72	0
14	22	23	27	72	0
14	20	24	21	65	0
14	15	27	23	65	0
14	30	26	29	85	0
14	32	27	27	86	0
14	30	31	27	88	0
14	33	29	26	88	0
14	31	31	27	89	0
14	30	28	24	82	1
14	31	30	16	77	0
14	29	23	23	75	0
14	29	27	23	79	0
14	30	27	23	80	0
14	29	30	23	82	0
14	28	22	24	74	0
14	33	26	24	83	1
14	29	28	25	82	0
14	29	29	22	80	0
14	27	25	23	75	0
14	29	28	23	80	0
14	25	30	25	80	0
14	26	29	20	75	1
14	17	23	24	64	0
14	29	25	23	77	0
14	28	28	27	83	0
14	26	30	21	77	1
14	18	27	20	65	0
14	30	26	24	80	1
14	30	28	27	85	0

14	26	30	21	77	1
14	27	22	18	67	0
14	19	29	19	67	0
14	28	25	21	74	1
14	28	29	28	85	1
14	27	32	27	86	0
14	25	32	20	77	0
14	28	29	24	81	0
14	29	31	27	87	1
14	27	32	27	86	0
14	23	29	21	73	0
14	29	31	24	84	1
14	29	30	26	85	0
14	28	33	28	89	1
14	25	28	21	74	0
14	31	23	23	77	0
14	29	30	25	84	1
14	28	33	27	88	0
14	24	27	18	69	0
14	29	24	24	77	1
14	27	22	18	67	0
14	30	31	26	87	0
14	24	30	20	74	1
14	26	29	23	78	1
14	27	34	20	81	0
14	28	31	25	84	0
14	23	27	21	71	0
14	25	30	24	79	0
14	12	32	24	68	0
14	25	31	25	81	0
14	30	33	22	85	0
14	24	35	25	84	0
14	27	34	25	86	1
14	30	34	26	90	0
14	30	33	25	88	1
14	26	24	19	69	1
14	28	35	25	88	0
14	28	31	25	84	1
14	14	25	26	65	0
14	24	30	23	77	0
14	26	26	26	78	0

14	25	33	27	85	0
14	25	29	17	71	0
14	27	30	27	84	0
14	24	33	23	80	0
14	26	33	24	83	0
14	25	26	26	77	0
14	25	26	17	68	0
14	25	29	27	81	0
14	25	26	26	77	0
14	19	21	20	60	1
14	22	23	25	70	0
14	24	29	27	80	0
14	28	29	26	83	0
14	26	29	27	82	0
14	26	26	21	73	0
14	37	32	26	95	1
14	23	27	21	71	0
14	30	22	23	75	0
14	30	24	6	60	0
14	23	33	23	79	0
14	28	34	22	84	0
14	23	26	22	71	1
14	23	26	21	70	1
14	24	26	25	75	0
14	23	32	23	78	0
14	23	31	16	70	0
14	23	31	22	76	0
14	25	28	25	78	1
14	25	28	24	77	0
14	30	34	25	89	0
14	18	28	24	70	0
14	19	24	20	63	1
14	24	23	24	71	0
14	21	24	20	65	1
14	28	33	23	84	1
14	25	28	25	78	0
14	23	21	20	64	1
14	23	21	24	68	0
14	25	29	19	73	1
14	30	28	24	82	0
14	24	30	22	76	1

14	25	34	19	78	0
14	21	21	23	65	0
14	20	21	23	64	0
14	30	32	19	81	0
14	23	29	19	71	0
14	25	27	21	73	0
14	32	32	23	87	0
14	23	31	23	77	0
14	33	33	24	90	0
14	31	34	11	76	0
14	20	23	21	64	0
14	32	29	18	79	1
14	33	27	23	83	0
14	26	25	21	72	0
14	23	23	20	66	0
14	26	24	20	70	0
14	28	24	25	77	1
14	33	26	24	83	1
14	33	26	24	83	1
14	28	24	24	76	0
14	29	23	21	73	0
14	30	31	24	85	1
14	33	32	24	89	0
14	25	26	24	75	0
14	28	26	24	78	0
14	29	21	23	73	0
14	30	25	20	75	0
14	30	28	20	78	0
14	25	25	25	75	0
14	31	28	19	78	0
14	29	29	19	77	0
14	27	25	25	77	0
14	33	32	23	88	0
14	22	27	21	70	0
14	26	21	24	71	0
14	24	29	22	75	0
14	31	33	26	90	0
14	26	30	22	78	1
14	25	22	26	73	0
14	18	25	20	63	0
14	29	33	25	87	1

14	26	30	22	78	1
14	32	29	23	84	1
14	30	32	22	84	1
14	30	29	14	73	1
14	24	27	21	72	0
14	31	33	22	86	0
14	29	20	20	69	0
14	28	26	25	79	0
14	25	32	23	80	1
14	24	20	24	68	0
14	28	29	21	78	0
14	28	27	24	79	0
14	24	22	26	72	0
14	29	29	23	81	0
14	26	22	25	73	1
14	18	20	19	57	1
14	22	25	24	71	0
14	24	24	20	68	0
14	27	31	23	81	1
14	33	29	23	85	0
14	27	25	23	75	0
15	27	22	23	72	0
15	32	28	28	88	0
15	26	11	27	64	1
15	27	25	26	78	1
15	20	23	9	52	1
15	29	29	23	81	1
15	20	19	24	63	0
15	29	31	22	82	0
15	28	27	22	77	1
15	34	30	25	89	1
15	30	29	25	84	0
15	35	30	23	88	0
15	31	23	24	78	0
15	34	31	27	92	1
15	33	24	28	85	0
16	34	31	23	88	1
16	33	30	23	86	0
16	31	33	24	88	1
16	33	30	24	87	1
16	33	33	23	89	1

16	29	30	22	81	0
16	33	26	25	84	0
16	30	24	27	81	0
16	32	32	27	91	0
16	30	30	19	79	0
16	30	29	22	81	0
18	16	30	16	62	0
18	19	29	27	75	0
18	22	31	22	75	0
18	18	29	28	75	0
18	21	30	27	78	1
18	16	29	23	68	0
18	25	35	28	88	1
18	21	29	28	78	0
18	23	32	26	81	1
18	22	30	29	81	1
18	25	33	28	86	1
18	25	34	28	87	0
18	19	30	29	78	1
18	23	29	27	79	1
18	24	28	30	82	0
18	27	30	26	83	0
18	33	31	29	93	0
18	26	29	28	83	1
18	33	29	27	89	0
18	26	29	28	83	1
18	25	29	28	82	0
18	22	30	21	73	0
18	24	31	22	77	0
18	22	30	21	73	0
18	22	33	27	82	0
18	31	29	25	85	1
18	22	22	24	68	1
18	22	28	23	73	1
18	21	26	24	71	0
18	24	30	23	77	1
18	22	30	26	78	0

18	26	29	23	78	0
18	25	28	25	78	1
18	23	26	26	75	1
18	24	28	21	73	1
18	22	32	27	81	0
18	25	26	25	76	0
18	22	28	25	75	0
18	23	18	21	62	0
18	14	24	9	47	0
19	30	34	26	90	0
19	34	33	24	91	0
19	28	31	23	82	0
19	37	29	23	89	1
19	35	34	24	93	1
19	39	31	27	97	1
19	39	35	25	99	1
19	35	31	19	85	0
19	37	34	26	97	0
19	38	28	27	93	0
19	29	31	20	80	1
19	37	34	25	96	0
19	32	30	23	85	0
19	35	30	22	87	0
19	37	32	25	94	1
19	33	33	22	88	1
19	37	34	25	96	1
19	34	31	19	84	1
19	37	30	23	90	1
19	38	30	24	92	0
19	31	32	22	85	0
19	32	30	25	87	0
19	40	29	24	93	1
19	37	36	24	97	1
19	29	36	19	84	0
19	39	30	25	94	1