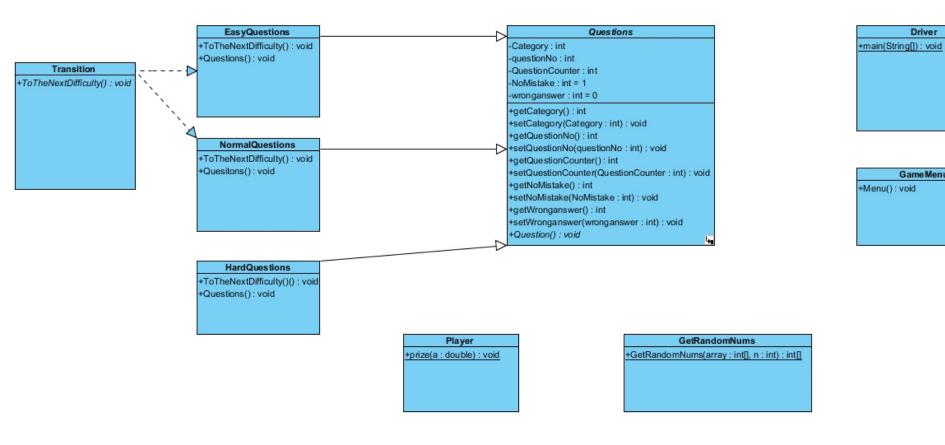
In this project,we decided to create an application that works as a knowledge contest such as "Kim Milyoner Olmak İster?". The main objective is answering questions that be present on the application and getting a prize according to the value of the question number you reached.



Driver

Game Menu

Since we are making a game we are not offering services to help them but to test their knowledge and gain money according to that also to make them have fun by playing it. Simply, We have 3 question classes which are EasyQuestion, NormalQuestion and HardQuestion. These classes includes different questions that have different level of difficulty and every classes will give 4 questions to user. In EasyQuestions, we have 4 categories and user can choose the category of the questions after that application is going to give randomly different questions in the same category. In NormalQuestions and HardQuestions, only level of difficulty is going to getting harder but there are no category selection in these classes. All questions and their topics completely different and application choose them randomly for the user. All of classes are child class of Questions abstract parent class. Furthermore we have three different classes which are GameMenu, Player and GetRandomNums. In GameMenu, we created a method to print out the menu to the user. In Player, we created an array and put the rewards into that array. In GetRandomNums, we created an ArrayList to preclude duplicate quesions during contest. Also we have an interface class called Transition.In Transition, we create a method to connect classes according to level of difficulty and EasyQuestions and NormalQuestions are implemented by this interface. Lastly, we have Driver class that contain main method. The "run-time polymorphisim" is used in Driver class as

firsttoforth.Question();

and we used default constructors.

```
package project;
public abstract class Questions {
       private int category;
       private int questionNo;
      private int QuestionCounter;
       private int NoMistake=1;
  private int wronganswer=0;
       public int getCategory() {
              return category;
      }
       public void setCategory(int myCategory) {
              this.category = myCategory;
      }
       public int getQuestionNo() {
              return questionNo;
      }
       public void setQuestionNo(int myQuestionNo) {
              this.questionNo = myQuestionNo;
      }
       public int getQuestionCounter(){
              return QuestionCounter;
      }
       public void setQuestionCounter(int myQuestionCounter){
              this.QuestionCounter=myQuestionCounter;
      }
```

```
public int getNoMistake() {
        return NoMistake;
}

public void setNoMistake(int noMistake) {
        NoMistake = noMistake;
}

public int getWronganswer() {
        return wronganswer;
}

public void setWronganswer(int wronganswer) {
        this.wronganswer = wronganswer;
}

public abstract void Question();
```

}

```
package project;
import java.util.*;
public class EasyQuestions extends Questions implements Transition{
       @Override
       public void ToTheNextDifficulty(){
              if(getNoMistake()==1){
       System.out.println("Now to the Normal Questions! \n");
 }}
  Scanner input = new Scanner(System.in);
  int[] QuestionNumbers = {1, 2, 3, 4, 5, 6, 7, 8};
  @Override
  public void Question(){
    int[] randomPicks = GetRandomNums.pickNRandom(QuestionNumbers, 4);
       String choice = null;
              System.out.println("What's the category do you want to choose for the first
four questions?");
              System.out.
              println("1-History 2-General Knowledge 3-Fundamentals of Computer 4-
Geography");
              setCategory(input.nextInt());
              input.nextLine();
              System.out.println("");
```

```
if(getCategory()==1){
    for (int z = 0; z < 4; z++)
    {
       if(getWronganswer()==1){
                             break;
                     }
        switch (randomPicks[z]) {
           case 1:
                     System.out.println("You are at the "+ (getQuestionCounter()+1) +".
question");
                     System.out.println("In which year did the Titanic sink?");
               System.out.println("A) 1908 B) 1910 C)1899 D)1912 ");
               choice = input.nextLine();
              if (choice.equals("d") || choice.equals("D")) {
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
                break;
             }
              else {
                System.out.println("Your answer was wrong. The competition is over.");
                setWronganswer(1);
                setQuestionCounter(getQuestionCounter()+1);
                System.out.println("You reached the "+getQuestionCounter()+" question");
                setNoMistake(0);
                break;
             }
```

```
System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("In which year did the demolition of the Berlin Wall
begin?");
             System.out.println("A) 1986 B) 1989 C)1991 D)1993 ");
             choice = input.nextLine();
             if (choice.equals("b") || choice.equals("B")) {
              setQuestionCounter(getQuestionCounter()+1);
              System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+" question");
               setNoMistake(0);
               break;
             }
           case 3:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println(" Who saw his crew dine on wormy biscuits and rats on his
fourth voyage to the New World?");
             System.out.println("A) Christopher Columbus B)Vasco de Gama C)Marco Polo
D)Americo Vespucci ");
             choice = input.nextLine();
             if (choice.equals("a") || choice.equals("A")) {
              setQuestionCounter(getQuestionCounter()+1);
                     System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
```

```
setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+" question");
               setNoMistake(0);
               break;
             }
           case 4:
            System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
            System.out.println("Which Empire declared war on Russia in October 1853,
suffering a defeat that gave Russia control of the Black Sea?");
            System.out.println("A) Great Britain B)Austria-Hungary Empire C)Ottoman
Empire D)Holy Roman Empire ");
            choice = input.nextLine();
            if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
            } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
            }
         case 5:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +" question");
```

```
System.out.println("What nationality was Karl Marx?");
              System.out.println("A) French B)Dannish C)Swiss D)German ");
               choice = input.nextLine();
             if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 6:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
            System.out.println("Which treaty finished the Turkish Independence War?");
             System.out.println("A)Loussane Peace Treaty B)Sevres Peace Treaty C)Mudanya
Truce D)Mondros Truce ");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             }
             else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
```

```
System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
          case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("In which year was the Wall Street Crash?");
            System.out.println("A)1923 B)1929 C)1931 D)1939");
            choice = input.nextLine();
            if (choice.equals("b") || choice.equals("B")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
          case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Who invented the telescope?");
            System.out.println("A)Leonardo Da Vinci B)Nicolaus Copernecus C)Johannes
Kepler D)Galileo Galilei");
            choice = input.nextLine();
            if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
```

setQuestionCounter(getQuestionCounter()+1);

```
System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
        }
      }
              }
    if(getCategory()==2){
      for (int z = 0; z < 4; z++) {
       if(getWronganswer()==1)
       {
              break;
       }
        switch (randomPicks[z]) {
           case 1:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("For which of the following disciplines is Nobel Prize
awarded?");
             System.out.println("A) Physics and Chemistry B) Physiology or Medicine
C)Literature, Peace and Economics D)All of the above ");
```

```
choice = input.nextLine();
             if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 2:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("In Roman mythology, Neptune is the equivalent to which
Greek god?");
             System.out.println("A)Zeus B)Poseidon C)Hades D)Apollon");
             choice = input.nextLine();
             if (choice.equals("b") || choice.equals("B")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break:
```

```
}
           case 3:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which American state is nearest to the Russian
Federation?");
             System.out.println("A)Nebraska B)Wyoming C)Delaware D)Alaska");
             choice = input.nextLine();
             if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 4:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("In which year, terrorists crash two planes into New York's
World Trade Centre on September 11 in a sequence of destruction? ");
             System.out.println("A)1999 B)2000 C)2001 D)2002 ");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
```

```
System.out.println("Your answer was wrong.The competition is over.");
     setWronganswer(1);
     setQuestionCounter(getQuestionCounter()+1);
     System.out.println("You reached the "+getQuestionCounter()+". question");
     setNoMistake(0);
     break;
   }
 case 5:
    System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
    System.out.println(" What is the official language of Andorra?");
   System.out.println("A)Spanish B)Catalan C)French D)Basque ");
   choice = input.nextLine();
   if (choice.equals("b") || choice.equals("B")) {
    setQuestionCounter(getQuestionCounter()+1);
     System.out.println("Congrats! Onto the next questions!");
     break;
   } else {
     System.out.println("Your answer was wrong. The competition is over.");
     setWronganswer(1);
     setQuestionCounter(getQuestionCounter()+1);
     System.out.println("You reached the "+getQuestionCounter()+". question");
     setNoMistake(0);
break;
   }
 case 6:
    System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
    System.out.println("What is the capital city of Saudi Arabia?");
   System.out.println("A)Riyadh B)Mecca C)Medina D)Jeddah ");
   choice = input.nextLine();
```

```
if (choice.equals("a") || choice.equals("A")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("How many times has Brazil won the World Cup Football
Championship? ");
            System.out.println("A)3 B)4 C)5 D)6 ");
            choice = input.nextLine();
            if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
```

```
case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println(" In terms of area, which island is the largest in the
Mediterranean Sea?");
             System.out.println("A)Sicily B)Cyprus C)Malta D)Crete ");
             choice = input.nextLine();
             if (choice.equals("a") || choice.equals("A")) {
                      setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
        }
      }
    }
    if(getCategory()==3){
      for (int z = 0; z < 4; z++) {
       if(getWronganswer()==1)
       {
              break;
       }
```

```
case 1:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Where does a computer add and compare data?");
             System.out.println("A) Hard disk B) Floppy disk C) CPU chip D) Memory chip ");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 2:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("The word \"Computer\" usually refers to the Central
processing unit plus?");
             System.out.println("A) External memory B) Internal memory C) Input devices D)
Output devices ");
             choice = input.nextLine();
             if (choice.equals("b") || choice.equals("B")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
```

switch (randomPicks[z]) {

```
} else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 3:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which device can produce the final product of machine
processing into a form usable by humans?");
             System.out.println("A) Storage B) Input devices C) Output devices D) Control");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
           case 4:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("A person who used his or expertise to gain access to other
peoples computers to get information illegally or do damage is");
```

```
System.out.println("A) Hacker B) Analyst C) Instant messenger D) Programmer
");
             choice = input.nextLine();
             if (choice.equals("a") || choice.equals("A")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
  case 5:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("High level language is also called: ");
             System.out.println("A) Problem oriented language B) Business oriented
language C) Mathematically oriented language D) All of the above ");
             choice = input.nextLine();
             if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
```

```
setQuestionCounter(getQuestionCounter()+1);
                System.out.println("You reached the "+getQuestionCounter()+". question");
                setNoMistake(0);
                break;
             }
           case 6:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which language is directly understood by the computer
without translation program?\n");
             System.out.println("A) Machine language B) High level language C) Assembly
language D) all of the above");
             choice = input.nextLine();
             if (choice.equals("a") || choice.equals("A")) {
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
                break; }
             else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
                setQuestionCounter(getQuestionCounter()+1);
                System.out.println("You reached the "+getQuestionCounter()+". question");
                setNoMistake(0);
                break:
             }
           case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which transmission media is fastest?");
             System.out.println("A) coaxial cable B) infrared rays C) Bluetooth D) fiber
optics");
             choice = input.nextLine();
```

```
if (choice.equals("d") || choice.equals("D")) {
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
        case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Process is:");
             System.out.println("A) contents of main memory B) a job in secondary memory
C) a program in execution D) program in High level language kept on disk");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
```

```
setNoMistake(0);
                break;
             }
        }
      }
    }
 if(getCategory()==4){
      for (int z = 0; z < 4; z++) {
       if(getWronganswer()==1)
       {
              break;
       }
        switch (randomPicks[z]) {
           case 1:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Instrument used to measure earthquake is known as:");
             System.out.println("A) seismograph B) quake meter C) barometer D) none of
the above ");
             choice = input.nextLine();
             if (choice.equals("a") || choice.equals("A")) {
```

```
setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
  case 2:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which one of the following zones of the atmosphere is
rich in Ozone gas?");
            System.out.println("A) Mesosphere B) Stratosphere C) Troposphere D)
Ionosphere ");
            choice = input.nextLine();
            if (choice.equals("b") || choice.equals("B")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
             } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
```

```
}
           case 3:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("What is the name of the capital city of Australia");
             System.out.println("A) Sydney B) Melbourne C) Canberra D) Adelaide");
             choice = input.nextLine();
             if (choice.equals("c") || choice.equals("C")) {
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
                break;
              }
       else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
                setQuestionCounter(getQuestionCounter()+1);
                System.out.println("You reached the "+getQuestionCounter()+". question");
                setNoMistake(0);
                break;
              }
           case 4:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Troposphere is the hottest part of the atmosphere
because?");
             System.out.println("A) It is closest to the sun B) It is heated by the Earth's
surface C) Heat is generated in it D) There are charged particles in it");
             choice = input.nextLine();
             if (choice.equals("b") || choice.equals("B")) {
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
```

break;

```
break;
     } else {
      System.out.println("Your answer was wrong. The competition is over.");
      setWronganswer(1);
       setQuestionCounter(getQuestionCounter()+1);
       System.out.println("You reached the "+getQuestionCounter()+". question");
       setNoMistake(0);
       break;
     }
case 5:
     System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
     System.out.println("Which of the following do not belong to solar system?");
    System.out.println("A) Asteroids B) Comets C) Planets D) Nebulae");
    choice = input.nextLine();
    if (choice.equals("d") || choice.equals("D")) {
      setQuestionCounter(getQuestionCounter()+1);
       System.out.println("Congrats! Onto the next questions!");
       break;
     } else {
      System.out.println("Your answer was wrong. The competition is over.");
      setWronganswer(1);
       setQuestionCounter(getQuestionCounter()+1);
       System.out.println("You reached the "+getQuestionCounter()+". question");
       setNoMistake(0);
       break;
     }
  case 6:
```

```
System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("We always see the same face of the Moon, because?");
             System.out.println("A) It is smaller than earth B) It revolves on its axis in the
direction opposite to that of the earth \nC) It takes equal time for revolution around the
earth and rotation on its own axis\n D) It rotates at the same speed as the earth around the
sun");
             choice = input.nextLine();
             if (choice.equals("c") | | choice.equals("C")) {
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
                break; }
              else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
                setQuestionCounter(getQuestionCounter()+1);
                System.out.println("You reached the "+getQuestionCounter()+". question");
                setNoMistake(0);
                break;
              }
           case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which imaginary line, located at zero degrees
latitude, divides the earth into Northern and Southern hemispheres?");
             System.out.println("A) Equator B) Horizontal C) vertical D) None of These");
             choice = input.nextLine();
             if (choice.equals("a") | | choice.equals("A")){
               setQuestionCounter(getQuestionCounter()+1);
                System.out.println("Congrats! Onto the next questions!");
                break;
              } else {
               System.out.println("Your answer was wrong. The competition is over.");
```

```
setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
             }
       case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("When a body is taken from the earth to the moon:\n");
            System.out.println("A) Its weight increases B) Its weight remains unchanged C)
It becomes completely weightless D) Its weight decreases");
            choice = input.nextLine();
            if (choice.equals("d") || choice.equals("D")) {
              setQuestionCounter(getQuestionCounter()+1);
               System.out.println("Congrats! Onto the next questions!");
               break;
            } else {
                System.out.println("Your answer was wrong.The competition is over.");
                setWronganswer(1);
               setQuestionCounter(getQuestionCounter()+1);
               System.out.println("You reached the "+getQuestionCounter()+". question");
               setNoMistake(0);
               break;
            }
        }
      }
```

```
}ToTheNextDifficulty();
        }
 }
package project;
import java.util.*;
public class NormalQuestions extends Questions implements Transition{
       @Override
       public void ToTheNextDifficulty(){
              if(getNoMistake()==1){
                     System.out.println("Now to the hard questions! \n");
              }}
       Scanner input = new Scanner(System.in);
  int[] QuestionNumbers = {1, 2, 3, 4, 5, 6, 7, 8};
       @Override
       public void Question() {
    int[] randomPicks = GetRandomNums.pickNRandom(QuestionNumbers, 4);
              String choice = null;
```

```
for (int z = 0; z < 4; z++) {
       if(getWronganswer()==1){
                            break;
                     }
                     switch (randomPicks[z]) {
       case 1:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("What so-called war spawned the dueling slogans Better
Dead Than RED and Better Red Than Dead in the 1950's?");
              System.out.println("A) World War II B) Korean War C)Vietnam War D)Cold War
");
              choice = input.nextLine();
              if (choice.equals("D") || choice.equals("d")){
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
       case 2:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
```

```
System.out.println("Where is the world's largest soccer stadium?");
       System.out.println("A) Spain B) Germany C)Brazil D)China ");
       choice = input.nextLine();
       if (choice.equals("C") || choice.equals("c")){
       setQuestionCounter(getQuestionCounter()+1);
    System.out.println("Congrats! Onto the next questions!");
    break;}
 else {
       System.out.println("Your answer was wrong. The competition is over.");
       setWronganswer(1);
    setQuestionCounter(getQuestionCounter()+1);
    System.out.println("You reached the "+getQuestionCounter()+". question");
    setNoMistake(0);
    break;
  }
case 3:
       System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
       System.out.println("Who said, "I think, therefore I am?" ");
       System.out.println("A) Descartes B) Aristotle C) Plato D) Archimedes ");
       choice = input.nextLine();
       if (choice.equals("A") || choice.equals("a")){
       SetQuestionCounter(getQuestionCounter()+1);
   System.out.println("Congrats! Onto the next questions!");
    break;
  } else {
       System.out.println("Your answer was wrong. The competition is over.");
       setWronganswer(1);
    setQuestionCounter(getQuestionCounter()+1);
    System.out.println("You reached the "+getQuestionCounter()+". question");
```

```
setNoMistake(0);
           break;
         }
       case 4:
          System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
          System.out.println("In what country the world's first water clock was invented?");
          System.out.println("A) Rome B) China C) Egypt D) Persia ");
          choice = input.nextLine();
              if (choice.equals("B") || choice.equals("b")){
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;
         } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
       case 5:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("What was the first James Bond book?");
              System.out.println("A)Goldfinger B)Casino Royale C)Diamonds are forever
D)Live and Let Die ");
              choice = input.nextLine();
```

```
if (choice.equals("B") || choice.equals("b")){
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;
         }
else {
         System.out.println("Your answer was wrong.The competition is over.");
         setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
       case 6:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +".
question");
              System.out.println("What was Al Capone's father's occupation?");
              System.out.println("A)Butcher B)Salesman C)Doctor D)Barber");
              choice = input.nextLine();
              if (choice.equals("D") || choice.equals("d")){
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
```

```
break;
         }
      case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Most popes have been Italian. Which country has the 2nd
highest number of Popes?");
              System.out.println("A)England B)Greece C)France D)Spain ");
              choice = input.nextLine();
              if (choice.equals("C") | | choice.equals("c")) {
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;
         } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
      case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which classic novel sold only fifty copies during the
authors lifetime?");
              System.out.println("A)Moby Dick B)Robin Hood C)Animal Farm D)Oliver
Twist ");
```

```
choice = input.nextLine();
              if (choice.equals("A") || choice.equals("a")){
              setQuestionCounter(getQuestionCounter()+1);
           System.out.println("Congrats! Onto the next questions!");
           break;}
         else {
               System.out.println("Your answer was wrong.The competition is over.");
               setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
                     }
              }
    ToTheNextDifficulty();
       }
}
package project;
import java.util.*;
public class HardQuestions extends Questions{
  int[] QuestionNumbers = {1, 2, 3, 4, 5, 6, 7, 8};
```

```
Scanner input = new Scanner(System.in);
       @Override
       public void Question() {
    int[] randomPicks = GetRandomNums.pickNRandom(QuestionNumbers, 4);
              String choice = null;
    for (int z = 0; z < 4; z++) {
       if(getWronganswer()==1){
                            break;
                     }
                     switch (randomPicks[z]) {
                     case 1:
                            System.out.println("You are at the "+ (getQuestionCounter()+1)
+". question");
                            System.out.println("Who has been Pope the longest in the 20th
century?");
                            System.out.println("A)Pope Fracis II B)Pope John Paul I C)Pope
Benedict XVI D)Pope St. John Paul II ");
                            choice = input.nextLine();
                            if (choice.equals("D") || choice.equals("d")) {
                               setQuestionCounter(getQuestionCounter()+1);
                                           if(getQuestionCounter()!=12){
                              System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
               System.out.println("Your answer was wrong.The competition is over.");
               setWronganswer(1);
```

```
setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
      case 2:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which middle name did UK Prime Minister Winston
Churchill share with Charlie Chaplin?");
              System.out.println("A) Spencer B) Chuck C) Philiph D) Edmund ");
              choice = input.nextLine();
              if (choice.equals("A") || choice.equals("a")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
              System.out.println("Congrats! Onto the next questions!"); }
           break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
              case 3:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Which capital city has the fewest cinemas in relation to its
population??");
              System.out.println("A)Pyongyang B)Tehran C)Cairo D)Kabul ");
```

```
choice = input.nextLine();
              if (choice.equals("C") || choice.equals("c")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
              System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
               System.out.println("Your answer was wrong.The competition is over.");
               setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
              case 4:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("According to the Aetherius Society, who is alive and living
on Venus?");
              System.out.println("A)Zeus B)Jesus Christ C)Buddha D)Thor ");
              choice = input.nextLine();
              if (choice.equals("B") || choice.equals("b")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
               System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
               System.out.println("Your answer was wrong. The competition is over.");
               setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
```

```
setNoMistake(0);
           break; }
              case 5:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +".
question");
              System.out.println("The name Chicago comes from a native Indian word that
means what?");
              System.out.println("A)Place that have lots of gold B)Place of gathering
C)Place of bull' horns D)Place that smells bad ");
              choice = input.nextLine();
              if (choice.equals("D") || choice.equals("d")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
               System.out.println("Congrats! Onto the next questions!");}
             break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
              case 6:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("There are more what in Los Angeles than in all France?");
              System.out.println("A)Directors B)Judges C)Brokers D)Spacemen ");
              choice = input.nextLine();
              if (choice.equals("B") || choice.equals("b")){
```

```
setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
                System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
              System.out.println("Your answer was wrong.The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
              case 7:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("Fifty six percent of Americans believe there is what in
heaven?");
              System.out.println("A)Baseball B)Hamburger C)Hot Dog D)Football ");
              choice = input.nextLine();
              if (choice.equals("A") || choice.equals("a")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
                System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break:
```

```
}
              case 8:
              System.out.println("You are at the "+ (getQuestionCounter()+1) +". question");
              System.out.println("What country has the most daily newspapers in the
world?");
              System.out.println("A)United Kingdom B)Japan C)India D)China ");
              choice = input.nextLine();
              if (choice.equals("D") || choice.equals("d")){
              setQuestionCounter(getQuestionCounter()+1);
              if(getQuestionCounter()!=12){
              System.out.println("Congrats! Onto the next questions!");}
           break;
         } else {
              System.out.println("Your answer was wrong. The competition is over.");
              setWronganswer(1);
           setQuestionCounter(getQuestionCounter()+1);
           System.out.println("You reached the "+getQuestionCounter()+". question");
           setNoMistake(0);
           break;
         }
                     }
              }
       }
}
```

.....

```
package project;
public class Player{
      public static double prize(double a) {
             double[] amount=new double[13];
             amount[0]=100;
             amount[1]=500;
             amount[2]=1000;
             amount[3]=2000;
             amount[4]=3000;
             amount[5]=5000;
             amount[6]=7500;
             amount[7]=15000;
             amount[8]=30000;
             amount[9]=60000;
             amount[10]=125000;
             amount[11]=250000;
             amount[12]=1000000;
             return amount[(int) (a-1)];
         }
      }
```

```
package project;
import java.util.*;
public class GetRandomNums {
       public static int[] pickNRandom(int[] array, int n) {
          List<Integer> list = new ArrayList<Integer>(array.length);
          for (int i : array)
            list.add(i);
          Collections.shuffle(list);
          int[] answer = new int[n];
         for (int i = 0; i < n; i++)
            answer[i] = list.get(i);
          Arrays.sort(answer);
          return answer;
       }
}
```

-----

```
package project;
public class GameMenu
{
       public static void Menu()
       {
              System.out.println("Welcome to our game: Can you become a millionaire!
\n");
              System.out.println("In this game you will be asked 12 questions in total and
you will be rewarded, ");
              System.out.println("with respect to the amount of questions you have done
correctly.");
              System.out.println("After every 4 questions the difficulty will get harder, so be
careful.");
              System.out.println("Also for the first 4 questions you get to choose the
category. \n");
              System.out.print("The possible rewards for the question reached: \n 1st-100tl,
2nd-500tl, 3rd-1.000tl, ");
              System.out.print("4th-2.000tl, 5th-3.000tl, 6th-5.000tl, 7th-7.500tl,8th-
15.000tl, \n 9th-30.000tl, 10th-60.000tl, ");
              System.out.println("11th-125.000tl, 12th-250.000tl,if you win 1.000.000tl");
              System.out.println("If you want to start a new game type in 1, if you want to
quit the game type in 0: ");
       }
}
```

```
package project;
public interface Transition {
       public abstract void ToTheNextDifficulty();
}
package project;
import java.util.*;
public class Driver
{
       public static void main(String[] args)
       {
              Scanner input = new Scanner(System.in);
              Questions firsttoforth = new EasyQuestions();
              Questions fifthtoeight = new NormalQuestions();
              Questions ninthtotwelfth = new HardQuestions();
              int ContinueOrQuit;
              for(;;)
              {
                      firsttoforth.setWronganswer(0);
                      fifthtoeight.setWronganswer(0);
                      ninthtotwelfth.setWronganswer(0);
                      firsttoforth.setQuestionCounter(0);
                      fifthtoeight.setQuestionCounter(0);
```

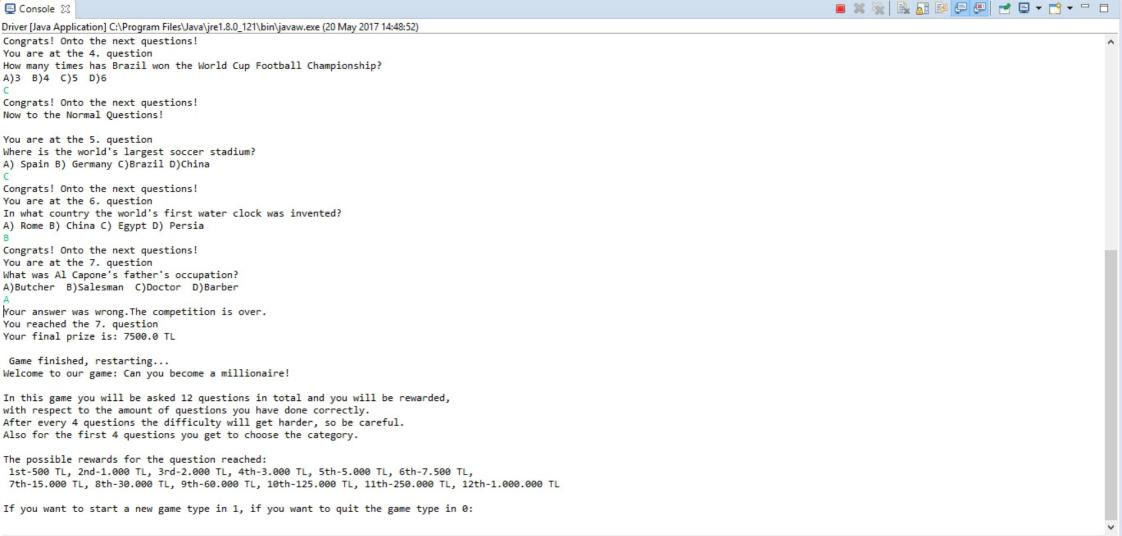
```
ninthtotwelfth.setQuestionCounter(0);
                     firsttoforth.setNoMistake(1);
                     fifthtoeight.setNoMistake(1);
                     ninthtotwelfth.setNoMistake(1);
              GameMenu.Menu();
              ContinueOrQuit=input.nextInt();
              if(ContinueOrQuit==0)
              {
                     System.out.println("Quitting...");
                     System.exit(0);
              }
              if(ContinueOrQuit==1)
              {
                     firsttoforth.Question();
                     if(firsttoforth.getNoMistake()==1)
                     {
                            fifthtoeight.setQuestionCounter(4);
                            fifthtoeight.Question();
                            if(fifthtoeight.getNoMistake()==1)
                            {
                                    ninthtotwelfth.setQuestionCounter(8);
                                    ninthtotwelfth.Question();
                                    if(ninthtotwelfth.getNoMistake()==1)
                                    {
                                           System.out.println("Congrats! You are the new
Millionaire!");
```

```
System.out.println("You won the ultimate prize of
"+Player.prize(1+ninthtotwelfth.getQuestionCounter())+" TL");
                                     }
                                     else
                                     {
                                            System.out.println("Your final prize is:
"+Player.prize(ninthtotwelfth.getQuestionCounter())+" TL");
                                     }
                             }
                             else
                             {
                                     System.out.println("Your final prize is:
"+Player.prize(fifthtoeight.getQuestionCounter())+" TL");
                             }
                      }
                      else
                      {
                             System.out.println("Your final prize is:
"+Player.prize(firsttoforth.getQuestionCounter())+" TL");
                      }
              }
               else
              {
                      System.out.println("You entered an invalid value");
```

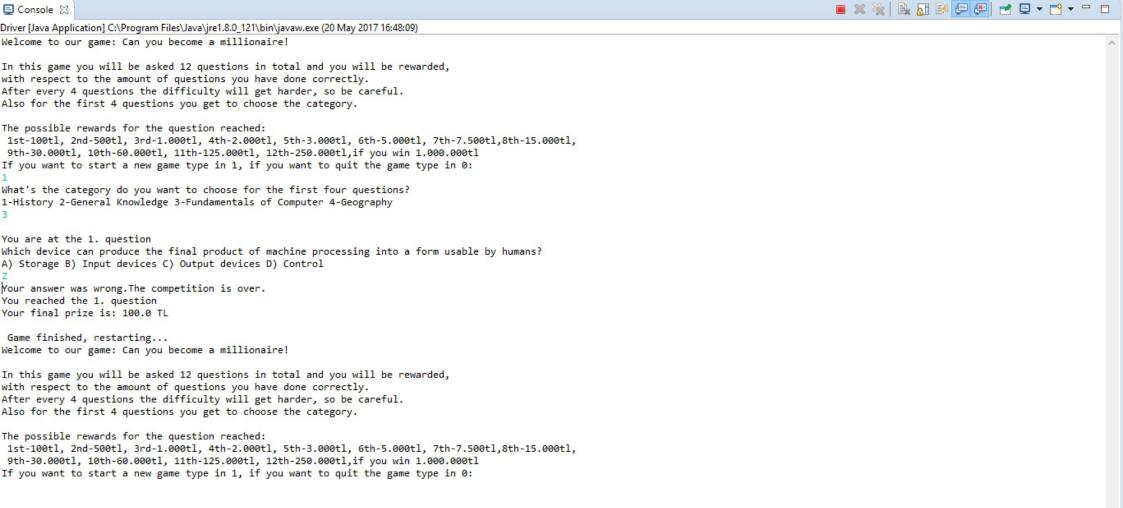
```
}
System.out.println("\n Game finished, restarting...");
}
}
```

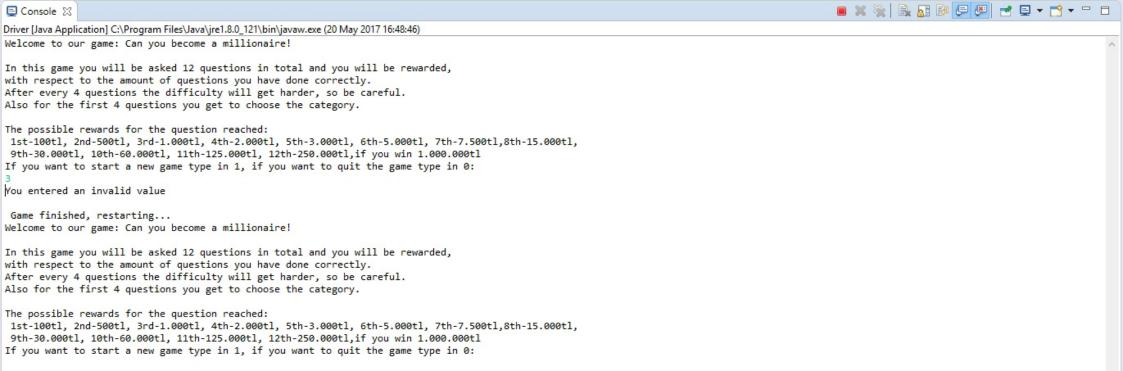
```
Driver [Java Application] C:\Program Files\Java\jre1.8.0_121\bin\javaw.exe (20 May 2017 16:40:20)
A)Butcher B)Salesman C)Doctor D)Barber
Congrats! Onto the next questions!
Now to the hard questions!
You are at the 9. question
Which capital city has the fewest cinemas in relation to its population??
A)Pyongyang B)Tehran C)Cairo D)Kabul
Congrats! Onto the next questions!
You are at the 10. question
The name Chicago comes from a native Indian word that means what?
A)Place that have lots of gold B)Place of gathering C)Place of bull' horns D)Place that smells bad
Congrats! Onto the next questions!
You are at the 11. question
There are more what in Los Angeles than in all France?
A)Directors B)Judges C)Brokers D)Spacemen
Congrats! Onto the next questions!
You are at the 12. question
Fifty six percent of Americans believe there is what in heaven?
A)Baseball B)Hamburger C)Hot Dog D)Football
Congrats! You are the new Millionaire!
You won the ultimate prize of 1000000.0 TL
Game finished, restarting...
Welcome to our game: Can you become a millionaire!
In this game you will be asked 12 questions in total and you will be rewarded,
with respect to the amount of questions you have done correctly.
After every 4 questions the difficulty will get harder, so be careful.
Also for the first 4 questions you get to choose the category.
The possible rewards for the question reached:
1st-100tl, 2nd-500tl, 3rd-1.000tl, 4th-2.000tl, 5th-3.000tl, 6th-5.000tl, 7th-7.500tl,8th-15.000tl,
9th-30.000tl, 10th-60.000tl, 11th-125.000tl, 12th-250.000tl, if you win 1.000.000tl
If you want to start a new game type in 1, if you want to quit the game type in 0:
```

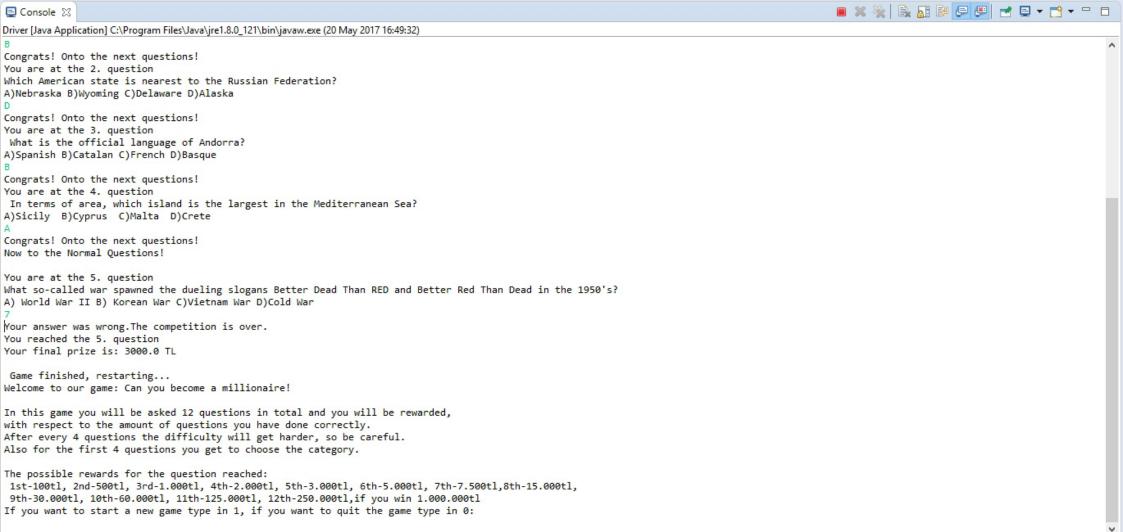
■ Console ※



^
^







## **MEMBERS OF GROUP**

- Batuhan ÜZÜMCÜ
- Can ÖZER
- **İhsan KATMER**
- Mohsen MOHKTARI

## **REFERENCES**

- Kim Milyoner Olmak İster ? (Orginate of the idea)
- https://www.britannica.com/quiz/browse (To find questions)
- https://docs.oracle.com/javase/tutorial/
- https://www.tutorialspoint.com/java/
- http://stackoverflow.com/questions/8409724/java-pick-severaldifferent-random-numbers-from-array-in-one-time (For the duplicate questions problem)