**King Saud University**

**Computer Science Department**

**Department of Computer Science**

**CSC 111 - Midterm Exam1**

**Student Name:……………………………………ID:…..………………………**

**Question 1:**

1- Implement the following class that represents a **Call** and contains the following attributes:

|  |
| --- |
| Call |
| + day:int  + startHour: int  + startMin: int  + receiver: string  + duration: double |
|  |

* day: the call start day between 1-7 (1 = Saturday ..... 7= Friday) .
* startHour: the start hour of the call between 1-24.
* startMin: the start minute of the call between 0-59.
* receiver: the person who receive the call, it will be super number if its value is family.
* duration: the call duration in hours (positive).
* cost: the cost of the call in cents.

The call cost calculated by 35 cents for one minute **except**

* Any call starts from 12:00 (HH:MM) until 17:59 in the days from Saturday until Wednesday calculated by 50 cents for one minute.
* Any call to the super number will cost 25 cents for one minute.

2- Using the class **Call**, write the class **TestCall** that will

* **Read only the day, start hour, start minute and duration in minutes of 2 calls**.
* Print the cost of the calls.
* Print the average duration in minutes of the calls.
* Print the maximum duration of a call on Thursday or Friday [HH:MM], if any.

**NOTE:**

You must check the information entered by the user, For example:

Day = 10, start Hour = 66, start Min = 77, receiver= family duration = -13

**Error: Bad call information**

**Valid example:**

Day =2, start Hour = 14, start Min = 50, receiver= family duration = 4

Day =7, start Hour = 14, start Min = 50, receiver= any duration = 1

Cost= 150 cents, average duration= 2.5, max in Thursday or Friday=1

**Student Name:……………………………………ID:…..………………………**

**Question 1Answer:**

**Student Name:……………………………………ID:…..………………………**

**Question 2: what is the output of the following program**

**public class NewClass { int x; char y; String n;}**

**public class Exam {**

**public static void main(String[] args) { Output**

**NewClass newClass=new NewClass();**

**NewClass Newclass=new NewClass();**

**newClass.n="5";**

**newClass.x=5;**

**newClass.n="5";**

**Newclass.n="5";**

**Newclass.x=5;**

**Newclass.n="6";**

**newClass.y='g';**

**switch(Newclass.y) {**

**case 'G': System.out.println("g"); break;**

**default: if(newClass.n.equals("5"))**

**System.out.print("newClass.k="+newClass.x);**

**System.out.println("newClass.k="+newClass.n); }**

**System.out.println("Newclass.k="+Newclass.x);**

**Newclass.y='u';**

**//System.out.print("newClass.k="+newClass.y);**

**System.out.println("newClass.k="+Newclass.n);**

**}}**