GEDİZUNIVERSITY

Faculty of Engineering and Architecture
Computer Engineering Department

COM 102 – OBJECT ORIENTED PROGRAMMING
POSTLAB #3

Academic Year: Spring 2016
Due Date and Hour: March 28, 2016 - Monday , 11.59pm (Submission)
Course Instructor: Assoc. Prof. Dr. Furkan INCE
Course Assistant: Res. Asst. Arzum KARATAŞ & Res. Asst Feyza GALİP

1-   Create a Java Program (75 points)

Write a class to solve department codes at Engineering and Architecture Faculty for Gediz University. Your class should have the following abilities:

-         Finding the department name for a given department code. **(10 points)**

-         Finding the department code for a given department at university and shown in the Table1. **(15 points)**

-         Getting the department code and department **(10 points)**

-         Editing the department code and department **(10 points)**

Department Code	Department
AR	Architecture
BME	Biomedical Engineering
COM	Computer Engineering
EEM	Electrical-Electronics Engineering
END	Industrial Engineering
INAR	Interior Architecture and Environmental Design
CIV	Civil Engineering
MEC	Mechanical Engineering
Others	Undefined

Table 1 : Engineering and Architecture Faculty Department list for Gediz University.

Then, write a test application to produce output similar to the following. **(23 points)**

*Please, before coding, draw a UML class diagram for the classes. **(7 points)**

Output :

```
This program a department code solver for Architecture and Engineering Faculty
at Gediz Unversity!
************************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
********************************************************


Please enter your choice [1,2,-1] :
1

Please enter a department code :
COM
COM is department code for Computer Engineering
************************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
********************************************************


Please enter your choice [1,2,-1] :
1

Please enter a department code :
AB
The department code does not belonged to the faculty!
************************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
********************************************************


Please enter your choice [1,2,-1] :
2

Please enter a department name in the faculty :
Interior Architecture and Environmental Design
Interior Architecture and Environmental Design's code is INAR
************************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
********************************************************


Please enter your choice [1,2,-1] :
2

Please enter a department name in the faculty :
```

```
Sigularity
There is no such a department in the faculty!


***********************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
************************************************************


Please enter your choice [1,2,-1] :
5
***********************M E N U**************************
  1 - Search department by a department code
  2 - Search department code by a department name
 -1 - Exit
************************************************************


Please enter your choice [1,2,-1] :
-1

 Exiting . . .
 Program terminated!
```

2-   CORRECT THE CODE (5x5p = 25 points)

Please , correct the following code in terms of good programming practices and any kind of errors so that you can see the following output and just send a text file(.txt , .doc, .docx or .pdf) explaining errors and corrected versions.

```java
public void main( String args[] ){

    int row = 1;

    While ( row <= 10 ) {
        int column = 1;

        if ( row % 2 == 0 ) ;
            System.out.print( " " );

        for(column<= 20) ;
        {
            System.out.print( " * " );
            column++;
        }

        System.out.println();
        row--;
    }

}
```
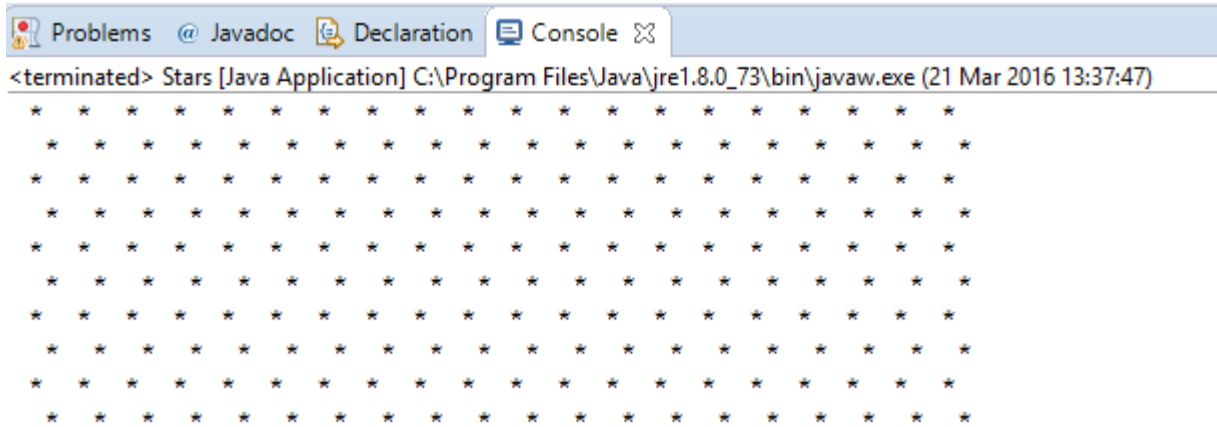
Output :

NOTES & SUBMISSION RULES :

1. You are **required to add comment properly**.(It will be graded)

2. You are **strongly advised** to obey the good programming practices (like naming conventions, indentations, commenting your codes and so on.) Using good programming practices is graded.

3. You are **required** to send your source code within a zipped file named :
   COM102_ StudentNumber_YourName_PostLabX.zip
   (e.g., COM102_011XXXX_ArzumKarataş_PostLab3.zip
       COM102_011XXXX_FeyzaGalip_PostLab3.zip)

4. **Be sure whether you attached your work to the e-mail or not**, because it is your responsibility to sending the work on time and in proper format.

5. You are required to **work alone**. Teamwork is **NOT** allowed and **cheating is strictly punished**!

6. You should **submit** your homework to the address following by **e-mail** on time.
   (to com102.2016gediz@gmail.com)

7. **Late submissions** will be graded by using the formula **100 - 10*d²** where **d** is the number of **late** submission **days**.