QUIZ 1

Subject: Introduction to Java
Due Date: 14.03.2020/ 23.59

Problem

Write an *Object Oriented Program* that allows users to manage passengers for a single bus with the plate "06 HUBM 06".

The program should store the information about the passengers of this bus, such as name, surname, gender, his/her seat number, etc.

The menu of the program should be like this

```
    Menu
1 Book a seat
2 Display all passengers with their seat numbers
3 Display all available seatIDs
4 Search
5 Exit
```

Create a *Phone* class with:
- Four attributes: countrycode, code (city or mobile operator), number (7 digits), type (home, office or mobile)
- Two constructor methods
  - One that receives all parameters
  - One that assigns countrycode +90 as default and receives other parameters
- Get / Set methods
- Display method

Create a *Passenger* class with:
- Attributes: name, surname, gender, *Phone* etc.
- One constructor method which receives all parameters
- Get / Set methods
- Display method

Create a *Seat* class with:
- Several attributes: int seatID, boolean status, *Passenger*
- One constructor method which receives all parameters
- Get / Set methods
- Display method

Create a *Bus* class with:
- Several attributes: plate, seatCount, *Seat*[] seats, etc.
- One constructor
- Get/Set methods
- *bookSeat (Passenger p, int seatID)* method
- *printAllPaasengers( )* method
- *printAllAvailableSeatIDs( )* method
- *search* method
  (search a passenger according to name surname and display his/her phone number)

Write a **main method** that
- Bus bus=new Bus("06 HUBM 06", 42);
- displays menu
- According to the user selection, the program should take parameters from the user and it should call related methods.

The menu of the program should be like this:

```
1-Book a seat
2-Cancel booking
3-Print all passengers
4-Print available seats
5-Print all seats
6-Search passenger
7-Exit
Enter your choose:
```

Sample output of program:

```
1-Book a seat
2-Cancel booking
3-Print all passengers
4-Print available seats
5-Print all seats
6-Search passenger
7-Exit
Enter your choose: 1
Enter seat id:5
Enter name:bahar
Enter surname:gezici
Enter gender:K
Enter country code:TR
Enter code:+90
Enter number:1234567
Enter type:MOBİLE
```

```
Enter your choose: 3
Seat: 5 Status: Reserved
bahar gezici (K)
MOBİLE Phone:TR +90 1234567
```

```
Enter your choose: 6
Enter name:bahar
Enter surname:gezici
bahar gezici (K)
MOBİLE Phone:TR +90 1234567
```

If you try to book a seat that is already reserved, you need to give an error message:

```
Enter your choose: 1
Enter seat id:5
Enter name:bahar
Enter surname:gezici
Enter gender:k
Enter country code:90
Enter code:tr
Enter number:23456
Enter type:home
The seat has already reserved!
```

Notes

•Do not miss the submission deadline.
•Save all your work until the quiz is graded.
•You can ask your questions via Piazza and you are supposed to be aware of everything discussed on Piazza.
•You must submit your work with the file hierarchy as stated below:
→<student_id. zip>
−Main. java
−*.java