Tutorial # 11

Q1: Convert the following Java class to its UML class representation:

a)
```java
public class PersonRec {

public int age;

public float height;

public int weight;

}
```
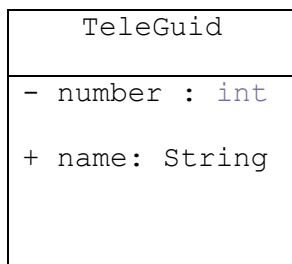
PersonRec
+age: int +height: float +weight: int
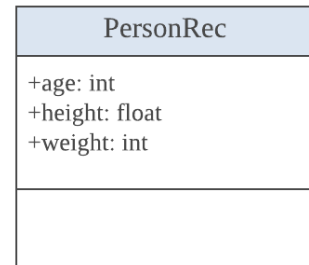
b)
```java
public class DateType {

private int month;

private int day;

private int year;

public void printDate(){

System.out.println(month +"/"+day+"/"+year);

}
```

DataType
-month: int -day: int -year: int
-printDate(): void
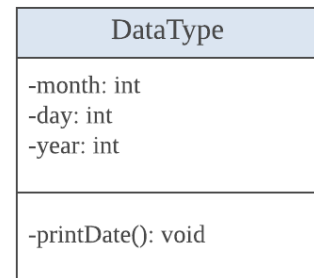
Q2: for each of the following class diagrams, write the corresponding class:

a)

TeleGuid
– number : int
+ name: String

```java
public class TeleGuid {
private int number;
public String name;
}
```
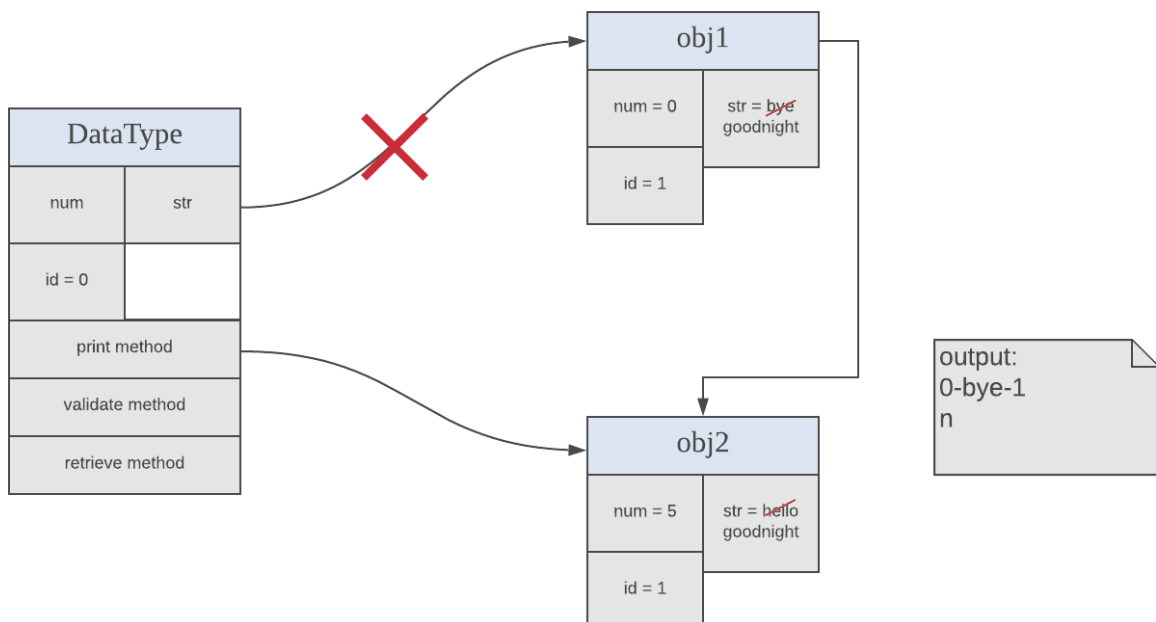
b)

```
           Clock

+ hours : int

+ minuts: int

+ seconds: int

+getHours(): int

+getMinutes():
int

+getSeconds():
int
```

```java
public class Clock {

    int hours;
    int minutes;
    int seconds;

    int getHours() {
        return hours;
    }
    int getMinutes() {
        return minutes;
    }
    int getSeconds() {
        return seconds;
    }
}
```

Q3: Show the memory state of the following Java program?

```java
Public class myClass {

public int num;

public String str;

public int id=0;

public void print() {
System.out.println(num+"-"+str+"-
"+id);
    }

public boolean validate()

{

if(num >= 0 && num <= str.length())

return true;

return false;

}

 public char retrieve()

{return str.charAt(num);

} }
```

```java
Public class testmyClass {
public static void main(String[]
args){


 myClass ob1= new myClass();

ob1.id++;

myClass ob2= new myClass();


ob2.id++;

ob2.str="hello";

ob2.num=5;


ob1.str="bye";

ob1.num=0;

ob1.print();

ob1=ob2;

ob1.str="good night";

if(ob2.validate())

System.out.println(ob2.retrive());

}
}
```