

## LAB#1

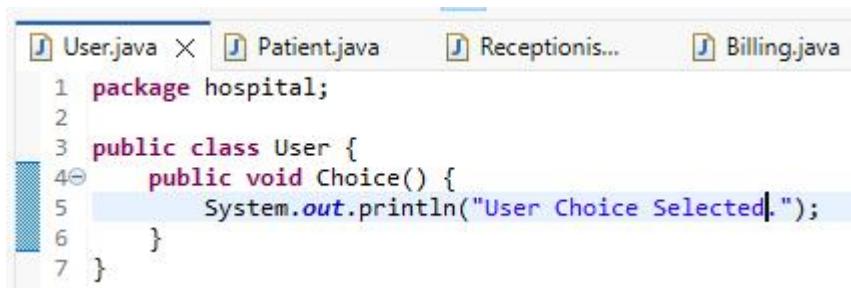
### **Introduction Eclipse IDE OBJECTIVE**

Introduction to Eclipse IDE, creating projects, its classes and mapping UML class diagram in to java code.

#### **LabTask:**

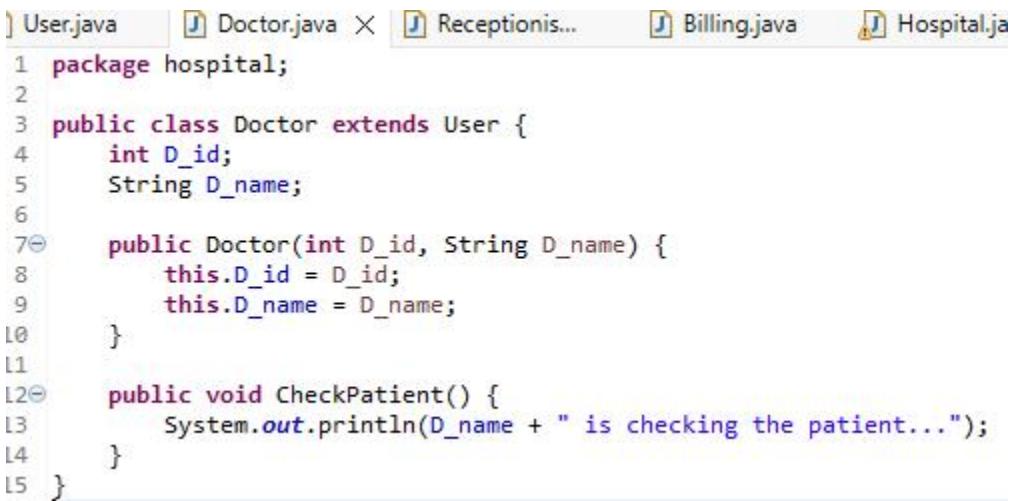
Write the java code with the help of the given class diagram of Hospital Management System.

CODE:



User.java

```
1 package hospital;
2
3 public class User {
4     public void Choice() {
5         System.out.println("User Choice Selected.");
6     }
7 }
```



Doctor.java

```
1 package hospital;
2
3 public class Doctor extends User {
4     int D_id;
5     String D_name;
6
7     public Doctor(int D_id, String D_name) {
8         this.D_id = D_id;
9         this.D_name = D_name;
10    }
11
12    public void CheckPatient() {
13        System.out.println(D_name + " is checking the patient...");
14    }
15 }
```

```
J User.java  J Patient.java X  J Doctor.java  J Billing.java  J Hospital.java
1 package hospital;
2
3 public class Patient extends User {
4     int P_id;
5     String P_name;
6     Doctor doctor; |
7
8     public Patient(int P_id, String P_name, Doctor doctor) {
9         this.P_id = P_id;
10        this.P_name = P_name;
11        this.doctor = doctor;
12    }
13
14     public void PayBill() {
15         System.out.println(P_name + " is paying the bill...");
16     }
17 }

J User.java  J Patient.java  J DOCTOR.java  J Receptionist... X  J Hospital.java
1 package hospital;
2
3 public class Receptionist extends User {
4     int R_id;
5     String R_name;
6     Patient patient; |
7
8     public Receptionist(int R_id, String R_name, Patient patient) {
9         this.R_id = R_id;
10        this.R_name = R_name;
11        this.patient = patient;
12    }
13
14     public void GiveAppointment() {
15         System.out.println(R_name + " is giving an appointment...");
16     }
17
18     public void GenerateBill() {
19         System.out.println(R_name + " generated the bill...");
20     }
21 }

1 package hospital;
2
3 public class Billing {
4     int B_no;
5     float B_amt;
6     Patient patient;
7     Receptionist receptionist;
8
9     public Billing(int B_no, float B_amt, Patient patient, Receptionist receptionist) {
10        this.B_no = B_no;
11        this.B_amt = B_amt;
12        this.patient = patient;
13        this.receptionist = receptionist;
14    }
15 }
16 }
```

```
| User.java | Patient.java | Doctor.java | Receptionist.java |  
1 package hospital;  
2  
3 public class Hospital {  
4     public static void main(String[] args) {  
5  
6         Doctor d = new Doctor(101, "Dr. Ahmed");  
7         Patient p = new Patient(201, "Habiba", d);  
8         Receptionist r = new Receptionist(301, "Abdullah", p);  
9         Billing b = new Billing(1, 5000, p, r);  
10  
11         d.CheckPatient();  
12         r.GiveAppointment();  
13         p.PayBill();|  
14         r.GenerateBill();  
15     }  
16 }
```

## OUTPUT:

```
Dr. Ahmed is checking the patient...  
Abdullah is giving an appointment...  
Habiba is paying the bill...  
Abdullah generated the bill...
```

