LAB # 1
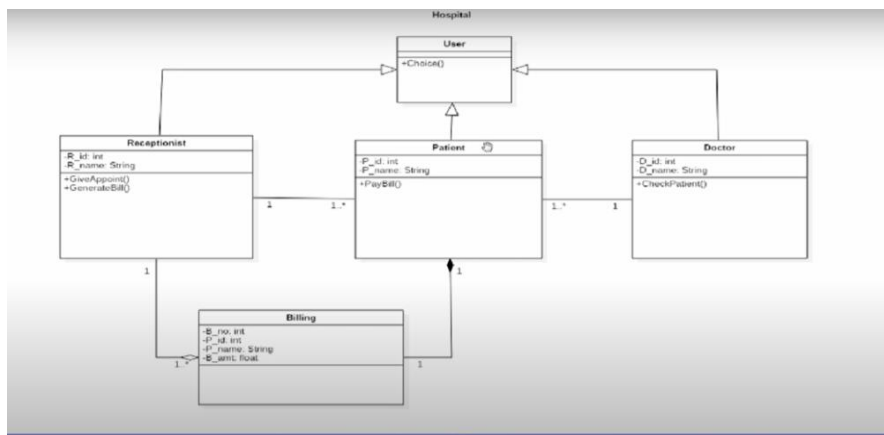
Introduction to Eclipse IDE

OBJECTIVE

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

Lab Task:

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

User.java

```
1 public class User {
2     public void Choice() {
3
4     }
5 }
6
```

`Receptionist.java`

```
1 public class Receptionist extends User {
2     int R_id;
3     String R_name;
4
5     public Receptionist(int R_id, String R_name) {
6         this.R_id = R_id;
7         this.R_name = R_name;
8     }
9
10     public void GiveAppoint() {
11     }
12
13     public void GenerateBill() {
14     }
15 }
16
```

Doctor.java

```java
1 public class Doctor extends User {
2     int D_id;
3     String D_name;
4
5     public Doctor(int D_id, String D_name) {
6         this.D_id = D_id;
7         this.D_name = D_name;
8     }
9
10     public void CheckPatient() {
11     }
12 }
13
```

Patient.java

```java
1 public class Patient extends User {
2     int P_id;
3     String P_name;
4
5     public Patient(int P_id, String P_name) {
6         this.P_id = P_id;
7         this.P_name = P_name;
8     }
9
10     public void PayBill() {
11         }
12 }
13
```

Billing.java

```java
1 public class Billing {
2     int B_no;
3     int P_id;
4     String P_name;
5     float B_amt;
6
7     public Billing(int B_no, int P_id, String P_name, float B_amt) {
8         this.B_no = B_no;
9         this.P_id = P_id;
10         this.P_name = P_name;
11         this.B_amt = B_amt;
12     }
13 }
14
```

HospitalManagementSystem.java

```java
1 public class HospitalManagementSystem {
2     public static void main(String[] args) {
3
4         Receptionist r = new Receptionist(1, "Rohit");
5         r.Choice();
6         r.GiveAppoint();
7         r.GenerateBill();
8
9         Patient p = new Patient(10, "Aman Mathur");
10        p.Choice();
11        p.PayBill();
12
13
14        Doctor d = new Doctor(100, "Dr. Naina");
15        d.Choice();
16        d.CheckPatient();
17
18        Billing b = new Billing(1000, 201, "Ali", 10000.0f);
19
20        System.out.println("Receptionist ID: " + r.R_id);
21        System.out.println("Receptionist Name: " + r.R_name);
22        System.out.println();
23
24        System.out.println("Patient ID: " + p.P_id);
25        System.out.println("Patient Name: " + p.P_name);
26        System.out.println();
27
28        System.out.println("Doctor ID: " + d.D_id);
29        System.out.println("Doctor Name: " + d.D_name);
30        System.out.println();
31
32        System.out.println("Billing Number: " + b.B_no);
33        System.out.println("Patient ID: " + b.P_id);
34        System.out.println("Patient Name: " + b.P_name);
35        System.out.println("Billing Amount: " + b.B_amt);
36    }
```

Output:

```
Receptionist ID: 1
Receptionist Name: Rohit

Patient ID: 10
Patient Name: Aman Mathur

Doctor ID: 100
Doctor Name: Dr. Naina

Billing Number: 1000
Patient ID: 201
Patient Name: Ali
Billing Amount: 10000.0
```