

# LAB # 1

## Introduction to Eclipse IDE

### Lab Task:

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

### Code:

```

6 package com.mycompany.scdlab;
7
8 public class Sodlab {
9
10     public static void main(String[] args) {
11         System.out.println("=== Hospital Management Demo ===");
12         System.out.println("Developed by: Sohaib Shahab\n");
13
14         Receptionist r = new Receptionist(1, "Sohaib");
15         Doctor d = new Doctor(2, "Dr. Anwar");
16         Patient p = new Patient(1, "Imran Khan");
17
18         r.scheduleAppointment(p, d);
19         d.checkPatient(p);
20
21         Billing b = new Billing(1001, p.id, p.name, 2500.5);
22         System.out.println("Bill generated: Billing[No=" + b.billNo + ", PatientID=" + b.patientID + ", PatientName=" + b.patientName +
23
24         b.showBill();
25
26         System.out.println(p.name + " is paying bill no: " + b.billNo + " of amount: " + b.amount);
27         System.out.println("\n=== Demo finished ===");
28     }
29 }
30
31 class Person {
32     int id;
33     String name;
34
35     Person(int id, String name) {
36         this.id = id;
37         this.name = name;
38     }
39 }
40
41 class Patient extends Person {
42     Patient(int id, String name) {
43         super(id, name);
44     }
45 }
46
47 class Doctor extends Person {
48     Doctor(int id, String name) {
49         super(id, name);
50     }
51
52     void checkPatient(Patient p) {
53         System.out.println("Doctor " + name + " is checking patient " + p.name);
54     }
55 }
56
57 class Receptionist extends Person {
58     Receptionist(int id, String name) {

```

```

56
57 class Receptionist extends Person {
58     Receptionist(int id, String name) {
59         super(id, name);
60     }
61
62     void scheduleAppointment(Patient p, Doctor d) {
63         System.out.println("Receptionist " + name + " scheduled appointment for " + p.name + " with " + d.name);
64     }
65 }
66
67 class Billing {
68     int billNo;
69     int patientID;
70     String patientName;
71     double amount;
72
73     Billing(int billNo, int patientID, String patientName, double amount) {
74         this.billNo = billNo;
75         this.patientID = patientID;
76         this.patientName = patientName;
77         this.amount = amount;
78     }
79
80     void showBill() {
81         System.out.println("Billing[No=" + billNo + ", PatientID=" + patientID + ", PatientName=" + patientName + ", Amount=" + amount +
82     }
83 }

```

## Output:

```

=== Hospital Management Demo ===
Developed by: Sohaib Shahab

Receptionist Sohaib scheduled appointment for Imran Khan with Dr. Anwar
Doctor Dr. Anwar is checking patient Imran Khan
Bill generated: Billing[No=1001, PatientID=1, PatientName=Imran Khan, Amount=2500.5]
Billing[No=1001, PatientID=1, PatientName=Imran Khan, Amount=2500.5]
Imran Khan is paying bill no: 1001 of amount: 2500.5

=== Demo finished ===
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BUILD SUCCESS
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```