HOSPITAL PROJECT

```
package hosp_manage;

import java.sql.*;

import java.util.Scanner;


public class HospitalApp {

   public static void main(String[] args) {

      Scanner in = new Scanner(System.in);

      String url = "jdbc:mysql://localhost:3306/my_db";

      String user = "root";

      String pass = "Penny#219";


      while(true){

         System.out.println("\n--- Hospital Menu ---");

         System.out.println("1. Show Avg Patients");

         System.out.println("2. Patients per Ward");

         System.out.println("3. Patients by Admission");

         System.out.println("4. Add Appointment");

         System.out.println("5. Quit");

         System.out.print("Choice: ");

         int op = in.nextInt();

         in.nextLine();


         if(op==1) avgPatients(url,user,pass);

         else if(op==2) wardPatients(url,user,pass);

         else if(op==3) admissionList(url,user,pass);

         else if(op==4) makeAppointment(in,url,user,pass);

         else if(op==5) break;

         else System.out.println("Wrong option");
```

```
    }
}

static void avgPatients(String url,String user,String pass){
    try(Connection c=DriverManager.getConnection(url,user,pass);
        CallableStatement st=c.prepareCall("call getcount()")){
        ResultSet r=st.executeQuery();
        if(r.next()){
            System.out.println("Avg patients/day = "+r.getDouble("average_patient_count"));
        }
    }catch(Exception e){System.out.println("Problem fetching avg");}
}

static void wardPatients(String url,String user,String pass){
    try(Connection c=DriverManager.getConnection(url,user,pass);
        CallableStatement st=c.prepareCall("call getpward()")){
        ResultSet r=st.executeQuery();
        while(r.next()){
            System.out.println(r.getString("ward")+" -> "+r.getString("patients"));
        }
    }catch(Exception e){System.out.println("Problem fetching wards");}
}

static void admissionList(String url,String user,String pass){
    try(Connection c=DriverManager.getConnection(url,user,pass);
        CallableStatement st=c.prepareCall("call getadmission()")){
        ResultSet r=st.executeQuery();
        while(r.next()){
            System.out.println(r.getInt("p_id")+" | "+r.getString("name")+" | "+r.getDate("admiss_date"));
```

```
        }
      }catch(Exception e){System.out.println("Problem fetching admissions");}
   }

   static void makeAppointment(Scanner in,String url,String user,String pass){
      try(Connection c=DriverManager.getConnection(url,user,pass)){
         System.out.print("Patient ID: ");
         int id=in.nextInt(); in.nextLine();
         System.out.print("Appointment Date (YYYY-MM-DD): ");
         String ad=in.nextLine();
         System.out.print("Admission Date (YYYY-MM-DD): ");
         String dd=in.nextLine();

         String q="insert into appoin(p_id,appoi_date,admiss_date) values(?,?,?)";
         PreparedStatement ps=c.prepareStatement(q);
         ps.setInt(1,id);
         ps.setDate(2,Date.valueOf(ad));
         ps.setDate(3,Date.valueOf(dd));
         ps.executeUpdate();
         System.out.println("Appointment added.");
      }catch(Exception e){System.out.println("Could not add appointment");}
   }
}
```

Assignment Question

1)Create an employee table

(2)Create following procedures :

(a)Adding 5000 bonus

(b)same name employees

(c)highest and lowest salaries

Answer

Create an employee table.

```
use mydb;

create table employee(
 id int,
 name varchar(30),
 salary int
);

insert into employee values
(1,'Sharma',50000),
(2,'Sharma',60000),
(3,'Neva Sharma',70000),
(4,'Neeva Shama',80000);
```

(a). Create a procedure for adding 5000 bonus to all employees.

```
delimiter //
create procedure addBonus()
begin
 update employee
 set salary = salary + 5000;
end //
delimiter ;
```

(c). Create a procedure to display highest and lowest salaries.

```
delimiter //
create procedure highLow()
begin
 select max(salary) as max_salary,
      min(salary) as min_salary
 from employee;
end //
delimiter ;
```

1. **Program to call addBonus()**

Answer

```
package jdbcCon;

import java.sql.*;

public class EmpBonus {
   public static void main(String[] args) {
      try(Connection con = DriverManager.getConnection(
            "jdbc:mysql://localhost:3306/mydb","root","Penny#219")) {

         CallableStatement cs = con.prepareCall("{call addBonus()}");
         cs.execute();

         Statement st = con.createStatement();
         ResultSet rs = st.executeQuery("select * from employee");

         while(rs.next()) {
            System.out.println(rs.getInt("id") + " " +
```

```
                    rs.getString("name") + " " +
                    rs.getInt("salary"));
            }
        } catch(Exception e) {
            System.out.println(e);
        }
    }
}
```

2. Program to call sameName()

Answer

```
package jdbcCon;

import java.sql.*;

public class EmpSame {
    public static void main(String[] args) {
        try(Connection con = DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/mydb","root","Penny#219")) {

            CallableStatement cs = con.prepareCall("{call sameName()}");
            ResultSet rs = cs.executeQuery();

            System.out.println("Employees with same name:");
            while(rs.next()) {
                System.out.println(rs.getString("name"));
            }
        } catch(Exception e) {
            System.out.println(e);
```

```
    }
  }
}
```

3. Program to call highLow()

Answer

```
package jdbcCon;

import java.sql.*;

public class EmpHighLow {
  public static void main(String[] args) {
    try(Connection con = DriverManager.getConnection(
        "jdbc:mysql://localhost:3306/mydb","root","Penny#219")) {

      CallableStatement cs = con.prepareCall("{call highLow()}");
      ResultSet rs = cs.executeQuery();

      if(rs.next()) {
        System.out.println("Highest Salary: " + rs.getInt("max_salary"));
        System.out.println("Lowest Salary: " + rs.getInt("min_salary"));
      }
    } catch(Exception e) {
      System.out.println(e);
    }
  }
}
```