HMS

#main method

#admin login.java

```
package com.test2;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
import java.util.Scanner;
public class AdminLogin {
        public static final String ANSI_RED="\u001B[31m";
         public static final String ANSI_BLACK="\u001B[30m";
        static Scanner s=new Scanner(System.in);
        static String id;
        private static Connection conn;
  private static final String USERNAME = "aparna";
  private static final String PASSWORD = "admin@123";
  private static final int MAX_ATTEMPTS = 3;
  public static void main(String[] args) throws SQLException {
    Scanner scanner = new Scanner(System.in);
    int attempts = 0;
```

```
while (attempts < MAX_ATTEMPTS) {
      System.out.print("Enter admin username: ");
      String username = scanner.nextLine();
      System.out.print("Enter admin password: ");
      String password =scanner.nextLine();
      if (username.equals(USERNAME) && password.equals(PASSWORD)) {
        System.out.println("Login successful!");
        adminMenu();
        break;
      } else {
        attempts++;
        System.out.println("Invalid credentials. Attempts remaining: " + (MAX_ATTEMPTS -
attempts));
      }
    }
    if (attempts == MAX ATTEMPTS) {
      System.out.println("Maximum login attempts exceeded!");
    }
  }
       static Patients patient= new Patients();
  static Doctors doctor=new Doctors();
  static Appointments appointment=new Appointments();
  static MedicalHistories medicalrecord=new MedicalHistories();
  static Rooms room=new Rooms();
  private static void adminMenu() throws SQLException {
```

```
Scanner scanner = new Scanner(System.in);
while(true)
{
    System.out.println("****RVS HOSPITAL MANAGEMNT SYSTEM*******");
System.out.println("Admin Menu:");
System.out.println("1. Patient");
System.out.println("2. Doctor");
System.out.println("3. Appointment");
System.out.println("4.Medical Records");
System.out.println("5.Room");
System.out.println("6. Exit");
System.out.println("**********************************):
System.out.println("Enter Your Choice within 1 to 6: ");
int outerchoice = scanner.nextInt();
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
boolean flag=true;
    while(flag)
{
   switch (outerchoice) {
case 1:{
    System.out.println("************");
    System.out.println("Patient Details");
    System.out.println("1.Add Patient");
    System.out.println("2.View Patient");
    System.out.println("3.Get Patient Details by Id");
    System.out.println("4.update patient Details");
    System.out.println("5. Exit");
    System.out.println("*************");
```

```
System.out.println("Enter Your Choice with in 1 to 5:");
int innerchoice=scanner.nextInt();
boolean f=true;
while(f) {
 switch(innerchoice)
 {
 case 1:
          patient.addPatient();
          break;
 case 2:
          patient.viewPatient();
          break;
 case 3:
          System.out.println("enter the id to search");
          id=s.nextLine();
          patient.getPatientById(id);
          break;
 case 4:
          patient.updatePatient();
          break;
 case 5:
          System.out.println("exit from Patient....Thank you");
          f=false;
          flag=false;
 }
 break;
}
```

```
break;
  }
case 2:
  {
     boolean flag1=true;
  while(flag1)
   {
     System.out.println("**********");
     System.out.println("Doctor Details");
     System.out.println("1.Add Doctor");
     System.out.println("2.View Doctor");
     System.out.println("3.Get Doctor Details by Id");
     System.out.println("4.update Doctor Details");
     System.out.println("5. Exit");
     System.out.println("***********");
     System.out.println("Enter Your Choice with in 1 to 5:");
    int innerchoice=scanner.nextInt();
     switch(innerchoice)
     {
     case 1:
             doctor.addDoctor();
             break;
     case 2:
             doctor.viewDoctor();
             break;
     case 3:
             System.out.println("enter the id to search");
             id=s.nextLine();
             doctor.getDoctorById(id);
```

```
break;
     case 4:
            doctor.updateDoctor();
            break;
     case 5:
            System.out.println("Exiting from Doctor Module...Thank you!!");
            flag1=false;
            flag=false;
     }
     break;
 }
  break;
}
 case 3:
 {
     boolean flag2=true;
     while(flag2)
     System.out.println("************");
    System.out.println("Appointment Details");
     System.out.println("1.Book Appointment");
     System.out.println("2.Check Appointment Availability");
    System.out.println("3. Exit");
    System.out.println("*************);
```

```
System.out.println("Enter Your Choice within 1 to 3 : ");
  int innerchoice=scanner.nextInt();
   switch(innerchoice)
   {
    case 1:
           appointment.BookAppointment();
           break;
   case 2:
           System.out.println("Enter Doctor Id to check for appointment");
           id=s.nextLine();
           System.out.println("Enter appointment date ");
           String app_date=s.nextLine();
           appointment.checkavailability(id,app_date);
           break;
   case 3:
           System.out.println("Exiting from Apointment...Thank you!!!");
    flag2=false;
    flag=false;
   }
   break;
break;
case 4:
    boolean flag4=true;
while(flag4)
    System.out.println("***********");
```

{

```
System.out.println("Medical Record Details");
   System.out.println("1.Add Medical History");
   System.out.println("2.View medical History");
   System.out.println("3.Get Medical Record Details by Id");
   System.out.println("4. Exit");
   System.out.println("************");
   System.out.println("Enter Your Choice within 1 to 4: ");
 int innerchoice=scanner.nextInt();
   switch(innerchoice)
 {
 case 1:
            medicalrecord.addMedicalHistory();
            break;
     case 2:
            medicalrecord.viewMedicalHistory();
            break;
     case 3:
          System.out.println("enter the id to search");
          id=s.nextLine();
            medicalrecord.getMedicalHistoryById(id);
            break;
     case 4:
            System.out.println("Exiting from Medical Record.... Thnak you!!");
            flag4=false;
            flag=false;
}
   break;
break;
```

```
}
                    case 5:
 {
    boolean flag5=true;
  while(flag5)
 {
    System.out.println("***********");
    System.out.println("Room Details");
    System.out.println("1.Add Room Details");
    System.out.println("2.View Room Details");
    System.out.println("3.Get Room Details by Id");
    System.out.println("4.update patient Details");
    System.out.println("5. Exit");
    System.out.println("************");
    System.out.println("Enter Your Choice with in 1 to 5:");
   int innerchoice=scanner.nextInt();
    switch(innerchoice)
    {
    case 1:
            room.addRoom();
            break;
    case 2:
            room.viewRoom();
            break;
    case 3:
            System.out.println("Enter id to get room details:");
            id=s.nextLine();
            room.getRoomById(id);
```

```
break;
       case 4:
               System.out.println("Exit from Room Details... Thank you!!");
        flag5=false;
        flag=false;
       }
       break;
    }
    break;
   }
    case 6:
       System.out.println("Exit From Menu");
      System.exit(0);
      break;
    }
    }
  }
  }
}
#Appointments.java
package com.test2;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;
```

```
public class Appointments {
        static Connection conn;
        Patients patient;
        Doctors doctor;
        Scanner s=new Scanner(System.in);
public Appointments() {
        this.conn = conn;
}
public void BookAppointment() throws SQLException {
        System.out.println("Enter appointment Id: ");
        String app_id=s.nextLine();
        System.out.println("Enter patient Id: ");
        String P_id=s.nextLine();
        System.out.println("Enter Doctor Id: ");
        String d_id=s.nextLine();
        System.out.println("Enter appointment date(yy--mm--dd): ");
        String app_date=s.nextLine();
        System.out.println("Enter appointment Time: ");
        String time=s.nextLine();
        Connection
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
        String query="insert into appointment values(?,?,?,?)";
```

```
try(PreparedStatement ps=conn.prepareStatement(query))
       {
               ps.setString(1, app_id);
               ps.setString(2, P_id);
               ps.setString(3, d_id);
               ps.setString(4,app_date);
               ps.setString(5, time);
               if(ps.executeUpdate()>0)
               {
                       System.out.println("Appointment Booked Succsessfully");
               }
               else
               {
                       System.out.println("Appointment is not Booked");
               }
       }
       }
 String d_id,app_date;
       public void checkavailability(String d_id,String app_date) throws SQLException
       {
               Connection
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
               String query="select * from appointment where d_id=? and app_date=?";
               try(PreparedStatement ps=conn.prepareStatement(query))
               {
                       ps.setString(1, d_id);
                       ps.setString(2, app_date);
```

#Patients.java

```
package com.test2;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.sql.ResultSet;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;

public class Patients {
    public static final String ANSI_RED="\u001B[31m";
    public static final String ANSI_BLACK="\u001B[30m";
```

```
public static final String ANSI_GREEN="\u001B[32m";
  static Connection conn;
        Scanner s=new Scanner(System.in);
                public void addPatient() throws SQLException
                {
                        System.out.println("Enter patient id: ");
                        String p_id=s.nextLine();
                        System.out.println("Enter patient FirstName: ");
                        String fname=s.nextLine();
                        System.out.println("Enter patient LastName: ");
                        String Iname=s.nextLine();
                        System.out.println("Enter patient Age: ");
                        int age=s.nextInt();
                        s.nextLine();
                        System.out.println("Enter patient Gender(M/F/O): ");
                        String gender=s.nextLine();
                        if(!validateGender(gender))
                        {
                                System.out.println(ANSI_RED);
                                System.out.println("Invalid input. Please enter 'M' for Male, 'F' for
Female, or 'O' for Other.");
                        }
                        System.out.println("Enter patient BloodGroup(A+,A-,B+,B-,AB+,AB-,O+,O-):
");
```

```
String bdg=s.nextLine();
                if(!validateBloodGroup(bdg)) {
                        System.out.println(ANSI_RED);
                        System.out.println("Invalid Blood Group");
               }
               System.out.println("Enter patient address: ");
               String address=s.nextLine();
               System.out.println("Enter patient phoneNumber: ");
               String phnumber=s.nextLine();
                System.out.println("Enter Doctor id: ");
               String d_id=s.nextLine();
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
               String query="insert into patient values(?,?,?,?,?,?,?,?)";
               try(PreparedStatement ps=conn.prepareStatement(query))
               {
                        ps.setString(1, p_id);
                        ps.setString(2,fname);
                        ps.setString(3, Iname);
                        ps.setInt(4, age);
                        ps.setString(5,gender);
                        ps.setString(6,bdg);
                        ps.setString(7,phnumber);
                        ps.setString(8,address);
                        ps.setString(9, d_id);
                if(ps.executeUpdate()>0)
```

```
{
                 System.out.println("patient details added successfully");
        }
        else
        {
                 System.out.println("Failed to add patient detals");
        }
}
}
private boolean validateGender(String gender) {
                System.out.println(ANSI_BLACK);
                String[] validGenders= {"M","F","O"};
                for(String validGender:validGenders) {
                        if(validGender.equalsIgnoreCase(gender)) {
                                 return true;
                        }
}
                return false;
        }
private boolean validateBloodGroup(String bloodGroup) {
        String regexp=^{^{\prime\prime}}(A|B|AB|O)[+-]$";
        return bloodGroup.matches(regexp);
}
```

```
public void viewPatient() throws SQLException {
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
               String query="select * from patient";
               try(PreparedStatement ps=conn.prepareStatement(query))
                       try(ResultSet rs=ps.executeQuery())
                       {
                               while(rs.next())
                                       String p_id=rs.getString("p_id");
                                       String fname=rs.getString("p_firstname");
                                       String Iname=rs.getString("p_lastname");
                                       int age=rs.getInt("p_age");
                                       String gender=rs.getString("p_gender");
                                       String bdg=rs.getString("p_bloodgroup");
                                       String phnumber=rs.getString("phnumber");
                                       String address=rs.getString("p_address");
                                       String d id=rs.getString("d id");
                                       System.out.println("***********");
                                       System.out.println("Patient Id: " + p_id);
                                       System.out.println("First Name: " + fname);
                                       System.out.println("Last Name: "+ Iname);
                                       System.out.println("Age: " + age);
                                       System.out.println("Gender: " + gender);
                                       System.out.println("BloodGroup: " + bdg);
                                       System.out.println("PhoneNumber: " + phnumber);
```

```
System.out.println("Address: " + address);
                                                                                                                                                                         System.out.println("Doctor Id: "+ d_id);
                                                                                                                                                                         System.out.println("************");
                                                                                                                                            }
                                                                                                                }
                                                                                   }
                                                        }
                                                        public void getPatientById(String p_id) throws SQLException
                                                        {
                            conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
                                                                                    String query="select * from patient where p_id=?";
                                                                                    try(PreparedStatement ps=conn.prepareStatement(query))
                                                                                    {
                                                                                                                 ps.setString(1,p_id);
                                                                                                                try(ResultSet rs=ps.executeQuery())
                                                                                                                {
                                                                                                                                             if(rs.next())
                                                                                                                      {
                                                                                                                                System.out.println(rs.getString(1) + "\t" + rs.getString(2)+ "\t" +
rs.getString(3) + "\t" + rs.getString(4) + "\t" + rs.getString(5) + "\t" + rs.getString(6) + "\t" + rs.getString(7) + "\t" + rs.getString(8) + "
rs.getString(7) + "\t" + rs.getString(8) +"\t" + rs.getString(9));
                                  }
                                                                                    }
                                                        }
                                                        public void updatePatient() throws SQLException
                                                        {
                                                                                       System.out.println("Enter patient id");
```

```
String p_id=s.nextLine();
                        System.out.println("Enter patient address to update");
                        String p_address=s.nextLine();
                        System.out.println("Enter phone number to update ");
                        String p_phnumber=s.nextLine();
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
                               String query="update patient set p_address=?, phnumber=? where
p_id=?";
                               try(PreparedStatement ps=conn.prepareStatement(query)){
                                     ps.setString(1, p_address);
                                     ps.setString(2, p_phnumber);
                                     ps.setString(3, p_id);
                                int res = ps.executeUpdate();
                                if(res>0)
                                {
                                        System.out.println(p_id + " Patient details updated
successfully");
                                }
                                else
                                {
                                        System.out.println("Failed to update patient details");
                                }
                      }
```

```
}
```

#Doctors.java

```
package com.test2;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
public class Doctors {
       public static final String ANSI_RED="\u001B[31m";
        public static final String ANSI_BLACK="\u001B[30m";
       static Connection conn;
       Scanner s=new Scanner(System.in);
       public void addDoctor() throws SQLException
       {
          System.out.println("Enter Doctor id: ");
               String d_id=s.nextLine();
               System.out.println("Enter Doctor FirstName: ");
               String fname=s.nextLine();
               System.out.println("Enter Doctor LastName: ");
               String Iname=s.nextLine();
```

```
System.out.println("Enter Doctor Gender(M/F/O): ");
               String gender=s.nextLine();
               if(!validateGender(gender))
               {
                        System.out.println(ANSI_RED);
                        System.out.println("Invalid input. Please enter 'M' for Male, 'F' for Female, or
'O' for Other.");
               }
               System.out.println("Enter Doctor specialization: ");
               String sp=s.nextLine();
               System.out.println("Enter Doctor Email: ");
               String email=s.nextLine();
               if(!validateEmail(email))
               {
                        System.out.println(ANSI_RED);
                        System.out.println("Invalid Email Format,Try Again!!!");
               }
        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
               String query="insert into doctor values(?,?,?,?,?)";
               try(PreparedStatement ps=conn.prepareStatement(query))
               {
                        ps.setString(1,d_id);
                        ps.setString(2,fname);
                        ps.setString(3,Iname);
                        ps.setString(4,gender);
                        ps.setString(5,sp);
```

```
ps.setString(6,email);
                if(ps.executeUpdate()>0)
                {
                        System.out.println("Doctor details added successfully");
                }
                else
                {
                        System.out.println("Failed to add Doctor detals");
                }
        }
        private boolean validateGender(String gender) {
                System.out.println(ANSI_BLACK);
                String[] validGenders= {"M","F","O"};
                for(String validGender:validGenders) {
                        if(validGender.equalsIgnoreCase(gender)) {
                                return true;
                       }
}
                return false;
        }
        public static boolean validateEmail(String email)
        {
                String emailRegexp="^[a-zA-Z0-9_+&*-]+(?:\\.[a-zA-z0-9_+&*-]+)*@(?:[a-zA-Z0-9-
]+\\.)+[a-zA-Z]{2,7}$";
                Pattern pattern=Pattern.compile(emailRegexp);
```

```
Matcher matcher=pattern.matcher(email);
        return matcher.matches();
}
public void viewDoctor() throws SQLException {
       String query="select * from doctor";
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
       try(PreparedStatement ps=conn.prepareStatement(query))
       {
               try(ResultSet rs=ps.executeQuery())
                       while(rs.next())
                       {
                               String d_id=rs.getString("d_id");
                               String fname=rs.getString("d_firstname");
                               String Iname=rs.getString("d_lastname");
                               String gender=rs.getString("d_gender");
                               String sp=rs.getString("specialization");
                               String email=rs.getString("email");
                               System.out.println("***********");
                               System.out.println("Doctor Id: " + d_id);
                               System.out.println("FirstName: " + fname);
                               System.out.println("LastName: " + Iname);
                               System.out.println("Gender: " + gender);
                               System.out.println("Specialization: " + sp);
                         System.out.println("Email: " + email);
                         System.out.println("***********");
                       }
```

```
}
        }
        public void getDoctorById(String id) throws SQLException
        {
                String query="select * from doctor where id=?";
                try(PreparedStatement ps=conn.prepareStatement(query))
                {
                        ps.setString(1,id);
                        try(ResultSet rs=ps.executeQuery())
                                if(rs.next())
                                         System.out.println(rs.getString(1) + "\t" + rs.getString(2)+
"\t" + rs.getString(3) + "\t" + rs.getString(4) + "\t" + rs.getString(5) + "\t" + rs.getString(6));;
                            }
                        }
          }
        String id, email;
        public void updateDoctor() throws SQLException
        {
                 System.out.println("Enter Doctor id");
                 String d_id=s.nextLine();
                 System.out.println("Enter Doctor email to update");
                 String email=s.nextLine();
```

```
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
                 String query="update patient set d_email=? where d_id=?";
                       try(PreparedStatement ps=conn.prepareStatement(query))
                       {
                         ps.setString(1, d_id);
                         ps.setString(6, email);
                         int res = ps.executeUpdate();
                                if(res>0)
                                {
                                System.out.println(d\_id + "Doctor details updated successfully"); \\
                                }
                                else
                                {
                                        System.out.println("Failed to update Doctor details");
                }
       }
       }
}
```

#Medicalhistories.java

package com.test2;

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;
public class MedicalHistories {
        Connection conn;
               public void addMedicalHistory()throws SQLException{
               Scanner s=new Scanner(System.in);
               System.out.println("Enter MedicalRecord id:");
               String m_id=s.nextLine();
               System.out.println("enter Patient id:");
               String P_id=s.nextLine();
               System.out.println("enter Doctor id:");
               String d_id=s.nextLine();
               System.out.println("enter Appointment id:");
               String app_id=s.nextLine();
               System.out.println("enter date of examination(yy--mm--dd):");
               String date_of_examination=s.nextLine();
               System.out.println("enter diagnosis:");
```

```
String diagnosis=s.nextLine();
        System.out.println("enter prescription:");
        String prescription=s.nextLine();
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
        String query="insert into medical_history values(?,?,?,?,?,?)";
        try(PreparedStatement ps=conn.prepareStatement(query))
        ps.setString(1, m_id);
        ps.setString(2,P_id);
        ps.setString(3, d_id);
        ps.setString(4,app_id);
        ps.setString(5,date_of_examination);
        ps.setString(6,diagnosis);
        ps.setString(7,prescription);
        //rs=ps.executeQuery();
        if(ps.executeUpdate()>0)
        {
                System.out.println("Medical Record Details added successfully");
        }
        else
        {
                System.out.println("Failed to add Medical Record detals");
        }
}
}
```

public void viewMedicalHistory() throws SQLException {

```
conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
String query="select * from medical_history";
try(PreparedStatement ps=conn.prepareStatement(query))
{
       try(ResultSet rs=ps.executeQuery())
       {
               while(rs.next())
               {
                       String m_id=rs.getString("m_id");
                       String P_id=rs.getString("p_id");
                       String d_id=rs.getString("d_id");
                       String app_id=rs.getString("app_id");
                       String date_of_examination=rs.getString("dateofexamination");
                       String diagnosis=rs.getString("diagnosis");
                       String prescription=rs.getString("prescription");
                       System.out.println("***********");
                       System.out.println("MedicalRecord Id: " + m_id);
                       System.out.println("Patient Id: " + P_id);
                       System.out.println("Doctor Id: " + d_id);
                       System.out.println("Appointment Id: " + app_id);
                        System.out.println("Date Of Examination: " + date_of_examination);
                       System.out.println("Diagnosis: " + diagnosis);
                       System.out.println("Prescription: " + prescription);
                        System.out.println("************");
```

```
}
                                     }
}
public void getMedicalHistoryById(String id) throws SQLException
{
                                      conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
                                      String query="select * from medical_history where id=?";
                                      try(PreparedStatement ps=conn.prepareStatement(query))
                                     {
                                                                           ps.setString(1,id);
                                                                           try(ResultSet rs=ps.executeQuery())
                                                                           {
                                                                                                                 if(rs.next())
                                                                                   {
                                                                                                                                                       System.out.println(rs.getString(1) + "\t" + rs.getString(2)+ "\t" +
rs.getString(3) + "\t" + rs.getString(4) + "\t" + rs.getString(5) + "\t" + rs.getString(6) + "\t" + rs.getString(7) + "\t" + rs.getString(8) + "
rs.getString(7));
                     }
                                    }
}
}
```

#Rooms.java

```
package com.test2;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
import java.util.Scanner;
public class Rooms {
        Connection conn;
public void addRoom( )throws SQLException{
        Scanner s=new Scanner(System.in);
        System.out.println("enter Room no:");
        String rno=s.nextLine();
        System.out.println("enter Patient id:");
        String P_id=s.nextLine();
        System.out.println("enter room type:");
        String r_type=s.nextLine();
        System.out.println("enter duration:");
        String period=s.nextLine();
        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
        String query="insert into room values(?,?,?,?)";
        try(PreparedStatement ps=conn.prepareStatement(query))
       {
               ps.setString(1, rno);
               ps.setString(2, P_id);
                ps.setString(3, r_type);
                ps.setString(4, period);
```

```
if(ps.executeUpdate()>0)
        {
                System.out.println("Room details added successfully");
        }
        else
        {
                System.out.println("Failed to add Room detals");
        }
}
}
public void viewRoom() throws SQLException {
        conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
       String query="select * from room";
       try(PreparedStatement ps=conn.prepareStatement(query))
       {
               try(ResultSet rs=ps.executeQuery())
               {
                       System.out.println("Room Details");
                       while(rs.next())
                       {
                               String rmno=rs.getString("rno");
                               String P_id=rs.getString("p_id");
                               String r_type=rs.getString("r_type");
                               String period=rs.getString("period");
```

```
System.out.println("***********");
                               System.out.println("Room No: " + rmno);
                               System.out.println("Patient Id: " + P_id);
                               System.out.println("Room Type: " + r_type);
                               System.out.println("Period: " + period);
                               System.out.println("***********");
                       }
   }
       }
}
public void getRoomById(String rno) throws SQLException
{
       conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/hms","root","aparna");
       String query="select * from room where rno=?";
       try(PreparedStatement ps=conn.prepareStatement(query))
       {
               ps.setString(1,rno);
               try(ResultSet rs=ps.executeQuery())
               {
                       if(rs.next())
                 {
                              System.out.println(rs.getString(1) + "\t" + rs.getString(2)+ "\t" +
rs.getString(3) + "\t" + rs.getString(4));;
           }
    }
       }
}
#Validations.java
```

package com.test2;

```
import java.util.Scanner;
import java.util.regex.Matcher;
import java.util.regex.Pattern;
public class Validation {
 public static final String ANSI_RED="\u001B[31m";
 public static final String ANSI_BLACK="\u001B[30m";
        static Scanner s=new Scanner(System.in);
       public static String validateUserPassword()
               boolean validUSerPassword=false;
               String UserPassword="";
               while(validUSerPassword)
                       System.out.println(ANSI_BLACK);
          //System.out.println("Enter New Password");
          UserPassword=s.nextLine();
               String UserPasswordRegexp="^{?=.[a-z]}(?=.[A-Z])(?+.\d)(?=.[@#$!%^&*()_+\-
=\\[\\]{};':\"\\\\,.<>\\/?]).{8,}$";
               Pattern pattern=Pattern.compile(UserPasswordRegexp);
               Matcher matcher=pattern.matcher(UserPassword);
               if(!matcher.matches())
                       System.out.println(ANSI_RED);
                       System.out.println("Invalid Password Format.Passowrd Should Contain
Atleast 8 Characters, one Special Character, one Number, and one Uppercase letter.");
                       continue;
               }
               validUSerPassword=true;
```

```
}
       return UserPassword;
}
       public static String validatePhoneNumber() {
               boolean validPhoneNumber = false;
               String phoneNumber = "";
               while (validPhoneNumber) {
                      System.out.print(ANSI_BLACK);
                      //System.out.print("Enter Phone number : ");
                       phoneNumber = s.nextLine();
                      String phoneNumberRegex = "^[0-9]{10}$";
                       Pattern pattern = Pattern.compile(phoneNumberRegex);
                       Matcher matcher = pattern.matcher(phoneNumber);
                       if (!matcher.matches()) {
                              System.out.print(ANSI_RED);
                              System.out.println("Invalid phone number format. Please enter a 10-
digit number.");
                              continue;
                      }
                      validPhoneNumber = true;
               }
               return phoneNumber;
       }
}
```