INFORMATICS PRACTICES PROJECT

E-LEARNING APPLICATIONS

EXCEL REPORT CARD GENERATOR

-AN ONLINE MARKS MANAGEMENT SYSTEM-

NAME: RIYA JAIN

ROLL NO. :

CERTIFICATE

This is to certify that **RIYA JAIN** of Class **XII A** studying in **AMITY INTERNATIONAL SCHOOL, MAYUR VIHAR** has satisfactorily completed the project on **REPORT CARD GENERATOR**, during the academic year **2019-20** towards partial fulfillment of credit for the Informatics Practices Practical evaluation of **CENTRAL BOARD OF SECONDARY EDUCATION 2019** under my supervision and guidance.

POOJA THAKUR
TEACHER INCHARGE

ACKNOWLEDGEMENT

I would like to extend my gratitude to all those who helped me complete my project. I would like to especially thank my Informatics Practices teacher Mrs. Pooja Thakur for her guidance and encouragement. She has helped throughout the various stages of the project and I thank her for all the support. I would also like to thank my parents for all their help.

RIYA JAIN

XII-A

INDEX

INTRODUCTION

Electronic learning, commonly written as e-learning, is Education via the Internet, network or standalone computer. E-learning is essentially the network-enabled transfer of skills and knowledge. It refers to using electronic applications and processes to learn. E-learning applications and processes include Web-based and computer-based learning, virtual class rooms and digital collaboration.

In this project, a marks manager and report card generator has been developed. This application is an example of a marks manager that lets the teacher add, maintain and search their student's marks

The aim of the project is to make the task of teachers easy. It can be used to create a database by adding marks of students in all subjects and streams. Teachers can even extract the marks of a particular student. Furthermore, teachers can generate a report card of a specific student easily.

This application can be used for following tasks:

- Add marks of students of different streams in the database
- Search and display marks of a particular student
- New teachers can sign up and use the facilities
- A report card can be generated which would include data in a tabular form
- Calculate percentage and grade in the report card

The front end interface of the application has been developed in Java using NetBeans IDE and the backend of the application has been developed in the form of database and tables using MySQL RDBMS.

DATABASE DESIGN

The database named “RIYAJAINCLASS12PROJECT”contains the following four tables

1) **LOGIN**-Contains the details of various teachers, which includes their name, age, gender, class incharge, username, password.

2) **SCIENCE**- Contains the details of students with science stream, which includes their name, section, rollno and term and internal marks in all subjects.

3) **COMMERCE**- Contains the details of students with commerce stream, which includes their name, section, rollno and term and internal marks in all subjects.

4)**ARTS**- Contains the details of students with humanities stream, which includes their name, section, rollno and term and internal marks in all subjects.

MYSQL CODING

Enter password:

Welcome to the MySQL monitor. Commands end with; or \g.

Your MySQL connection id is 20

Server version: 5.1.33-community MySQL Community Server (GPL)

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> create database RIYAJAINCLASS12PROJECT;

Query OK, 1 row affected (0.01 sec)

mysql> use RIYAJAINCLASS12PROJECT;

Database changed

mysql> create table LOGIN(name varchar(30),age int(2),gender varchar(10),class varchar(5),user varchar(30),pass varchar(15));

Query OK, 0 rows affected (0.22 sec)

mysql> create table SCIENCE(name varchar(30),section char(2),rno int(2),phy decimal(5,2),chem decimal(5,2),math decimal(5,2),optional decimal(5,2),english decimal(5,2),phyin int(2),chemin int(2),mathin int(2),optin int(2),engine int(2),primary key(section,rno));

Query OK, 0 rows affected (0.22 sec)

mysql> create table COMMERCE(name varchar(30),section char(2),rno int(2),bst decimal(5,2),acc decimal(5,2),math decimal(5,2),eco decimal(5,2),english decimal(5,2),bstin int(2),accin int(2),mathin int(2),ecoin int(2),engine int(2), primary key(section,rno));

Query OK, 0 rows affected (0.22 sec)

mysql> create table ARTS(name varchar(30),section char(2),rno int(2),hist decimal(5,2),polsc decimal(5,2),legal decimal(5,2),optional decimal(5,2),english decimal(5,2),hisin int(2),polin int(2),legin int(2),optin int(2),engine int(2), primary key(section,rno));

Query OK, 1 row affected (0.05 sec)

TABLE STRUCTURE

1. Login Table

```
mysql> desc login;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| name   | varchar(30) | YES  |     | NULL    |       |
| age    | int(2)      | YES  |     | NULL    |       |
| gender | varchar(10) | YES  |     | NULL    |       |
| class  | varchar(5)  | YES  |     | NULL    |       |
| user   | varchar(30) | NO   | PRI | NULL    |       |
| pass   | varchar(15) | NO   |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
6 rows in set (0.03 sec)
```

2. Science Table

```
mysql> desc science;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| Name     | varchar(30) | YES  |     | NULL    |       |
| Section  | char(2)     | NO   | PRI |         |       |
| Rno      | int(2)      | NO   | PRI | 0       |       |
| phy      | decimal(5,2)| YES  |     | NULL    |       |
| chem     | decimal(5,2)| YES  |     | NULL    |       |
| math     | decimal(5,2)| YES  |     | NULL    |       |
| Optional | decimal(5,2)| YES  |     | NULL    |       |
| english  | decimal(5,2)| YES  |     | NULL    |       |
| phyin    | int(2)      | YES  |     | NULL    |       |
| chemin   | int(2)      | YES  |     | NULL    |       |
| mathin   | int(2)      | YES  |     | NULL    |       |
| optin    | int(2)      | YES  |     | NULL    |       |
| engin    | int(2)      | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
13 rows in set (0.08 sec)
```

3. Commerce Table

```
mysql> desc commerce;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| Name    | varchar(30) | YES  |     | NULL    |       |
| Section | char(2)     | NO   | PRI |         |       |
| Rno     | int(2)      | NO   | PRI | 0       |       |
| bst     | decimal(5,2)| YES  |     | NULL    |       |
| acc     | decimal(5,2)| YES  |     | NULL    |       |
| math    | decimal(5,2)| YES  |     | NULL    |       |
| eco     | decimal(5,2)| YES  |     | NULL    |       |
| english | decimal(5,2)| YES  |     | NULL    |       |
| bstin   | int(2)      | YES  |     | NULL    |       |
| accin   | int(2)      | YES  |     | NULL    |       |
| mathin  | int(2)      | YES  |     | NULL    |       |
| ecoin   | int(2)      | YES  |     | NULL    |       |
| engin   | int(2)      | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
13 rows in set (0.06 sec)
```

4. Arts Table

```
mysql> desc arts;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| Name     | varchar(30) | YES  |     | NULL    |       |
| Section  | char(2)     | NO   | PRI |         |       |
| Rno      | int(2)      | NO   | PRI | 0       |       |
| hist     | decimal(5,2)| YES  |     | NULL    |       |
| polsc    | decimal(5,2)| YES  |     | NULL    |       |
| legal    | decimal(5,2)| YES  |     | NULL    |       |
| optional | decimal(5,2)| YES  |     | NULL    |       |
| english  | decimal(5,2)| YES  |     | NULL    |       |
| hisin    | int(2)      | YES  |     | NULL    |       |
| polin    | int(2)      | YES  |     | NULL    |       |
| legin    | int(2)      | YES  |     | NULL    |       |
| optin    | int(2)      | YES  |     | NULL    |       |
| engin    | int(2)      | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
13 rows in set (0.05 sec)
```

GUI Screenshots and JAVA Coding

NEW USER BUTTON:

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
this.setVisible(false);
new newuser().setVisible(true);
   }
```

LOGIN BUTTON:

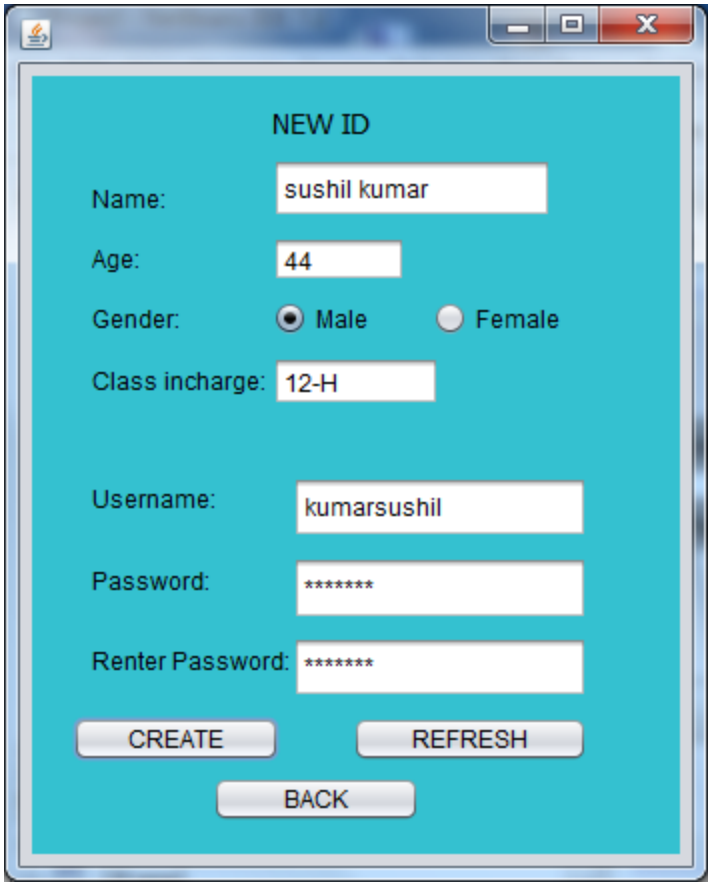
```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
String word="";
String user=jTextField1.getText();
if(user.isEmpty())
   JOptionPane.showMessageDialog(this,"Please enter your username and password");
else
{
```

```
   try
   {Class.forName("java.sql.DriverManager");
    Connection con=(Connection)
    DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
    Statement stmt=(Statement) con.createStatement();
    String query="select pass from login where user='"+user+"';";
    ResultSet rs=stmt.executeQuery(query);

    if(rs.next())
    { word=rs.getString("pass");  }
    else
    { JOptionPane.showMessageDialog(null,"invalid username");  }

String password=String.valueOf(jPasswordField1.getPassword());
if(password.equals(word))
  {this.setVisible(false);
   new home().setVisible(true);}
else
   JOptionPane.showMessageDialog(null,"invalid password");
}

   catch(Exception e)
    {JOptionPane.showMessageDialog(this,e.getMessage());   }
}
   }
```

EXIT BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
```

```
System.exit(0);
    }
```



CREATE BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
String name=jTextField1.getText();
String age=jTextField2.getText();

String gender="";
if(jRadioButton1.isSelected())
  gender="male";
else if(jRadioButton2.isSelected())
   gender="female";

String incharge=jTextField3.getText();
```

```
String user=jTextField4.getText();
String pass=String.valueOf(jPasswordField1.getPassword());

try
{ Class.forName("java.sql.DriverManager");
  Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
  Statement stmt=(Statement) con.createStatement();
  String query="insert into login
values('"+name+"','"+age+"','"+gender+"','"+incharge+"','"+user+"','"+pass+"');";
  stmt.executeUpdate(query);       }

catch(Exception e)
{ JOptionPane.showMessageDialog(this,e.getMessage());    }

   }
```

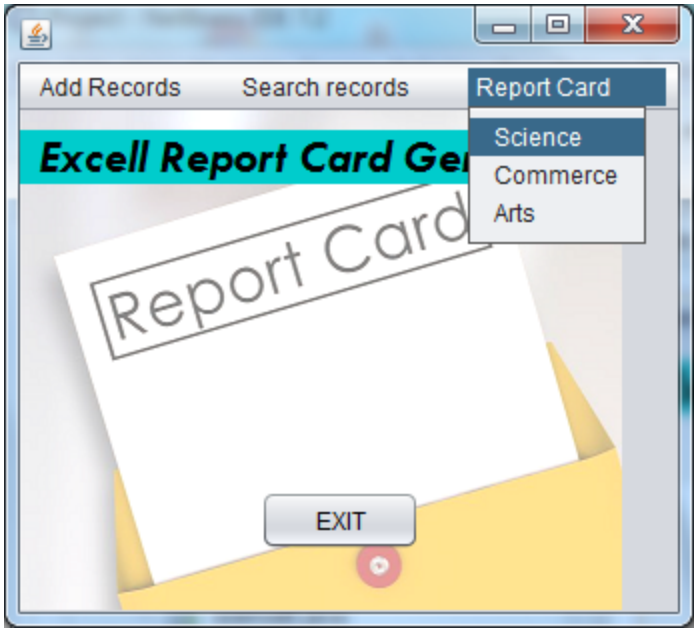
REFRESH BUTTON:

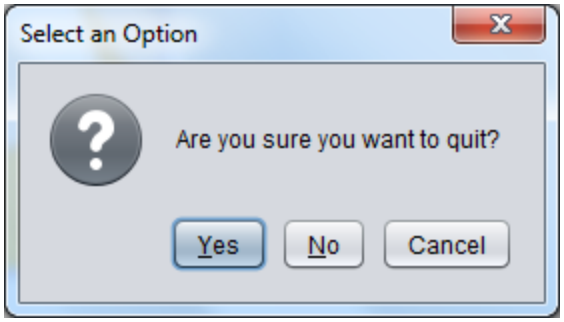
```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
this.setVisible(false);
new login().setVisible(true);
   }
```

EXIT BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField4.setText("");
```

```
jPasswordField1.setText("");
jPasswordField2.setText("");
buttonGroup1.clearSelection();
    }
```





EXIT BUTTON:

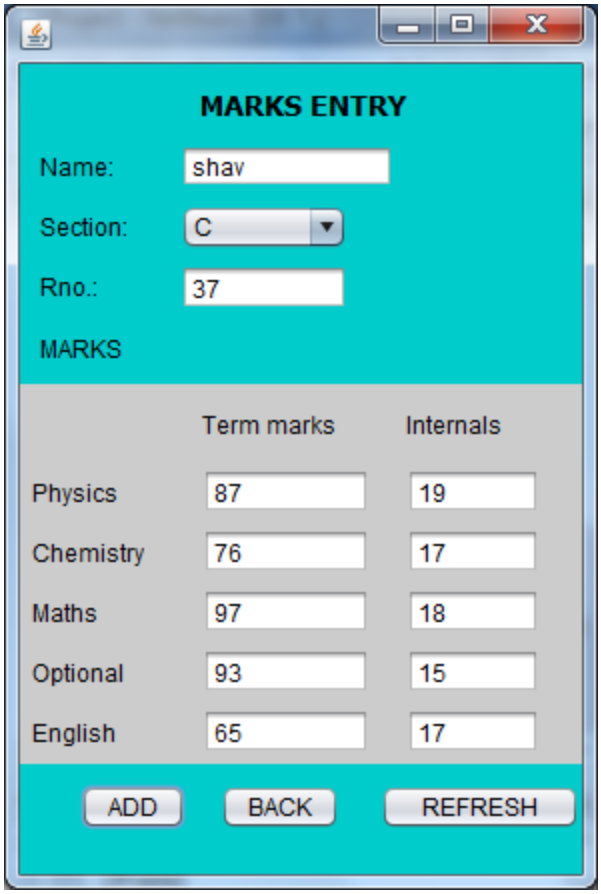
```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
int i=JOptionPane.showConfirmDialog(null,"Are you sure you want to quit?");
if(i==0)
{   this.setVisible(false);
    new login().setVisible(true);  }
    }
```

MENU OPTIONS:

```
    private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
     this.setVisible(false);
```

```
new scienceA().setVisible(true);        }

  private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
     this.setVisible(false);
new commerceA().setVisible(true);    }

  private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {
     this.setVisible(false);
new scienceB().setVisible(true);    }

  private void jMenuItem5ActionPerformed(java.awt.event.ActionEvent evt) {
       this.setVisible(false);
new commerceB().setVisible(true);    }

  private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
      this.setVisible(false);
new artsA().setVisible(true);    }

  private void jMenuItem6ActionPerformed(java.awt.event.ActionEvent evt) {
    this.setVisible(false);
new artsB().setVisible(true);      }

  private void jMenuItem7ActionPerformed(java.awt.event.ActionEvent evt) {
      this.setVisible(false);
new Sreport().setVisible(true);    }

  private void jMenuItem8ActionPerformed(java.awt.event.ActionEvent evt) {
      this.setVisible(false);
```

```
new Creport().setVisible(true);    }


  private void jMenuItem9ActionPerformed(java.awt.event.ActionEvent evt) {
     this.setVisible(false);
new Areport().setVisible(true);    }
```



ADD BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
String name=jTextField1.getText();
String sec=String.valueOf(jComboBox1.getSelectedItem());
int rno=Integer.parseInt(jTextField2.getText());
Double phy=Double.parseDouble(jTextField3.getText());
Double chem=Double.parseDouble(jTextField4.getText());
Double math=Double.parseDouble(jTextField5.getText());
Double opt=Double.parseDouble(jTextField6.getText());
Double eng=Double.parseDouble(jTextField7.getText());
int phyin=Integer.parseInt(jTextField8.getText());
int chemin=Integer.parseInt(jTextField9.getText());
```

```
int mathin=Integer.parseInt(jTextField10.getText());

int optin=Integer.parseInt(jTextField11.getText());

int engin=Integer.parseInt(jTextField12.getText());


try

{ Class.forName("java.sql.DriverManager");

  Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");

  Statement stmt=(Statement) con.createStatement();

  String query="insert into science
values('"+name+"','"+sec+"','"+rno+"','"+phy+"','"+chem+"','"+math+"','"+opt+"','"+eng+"','"+phyin+"','"+
chemin+"','"+mathin+"','"+optin+"','"+engin+"');";

  stmt.executeUpdate(query);       }


catch(Exception e)

{ JOptionPane.showMessageDialog(this,e.getMessage());    }

   }
```

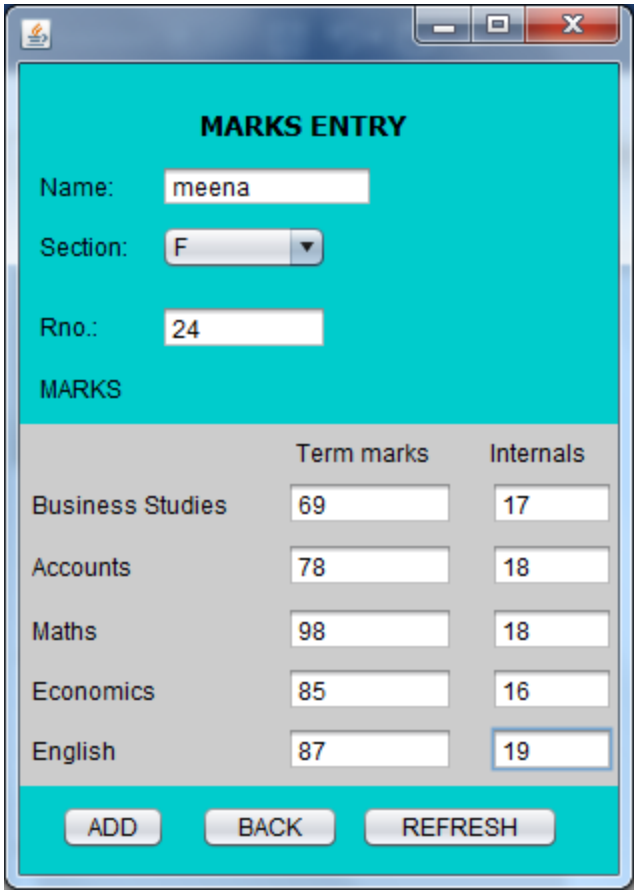
BACK BUTTON:

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

this.setVisible(false);

new home().setVisible(true);

   }
```

REFRESH BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

jTextField1.setText("");

jTextField2.setText("");

jTextField3.setText("");
```

```
jTextField4.setText("");
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jTextField11.setText("");
jTextField12.setText("");
    }
```



ADD BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
String name=jTextField1.getText();
String sec=String.valueOf(jComboBox1.getSelectedItem());
int rno=Integer.parseInt(jTextField2.getText());
Double bst=Double.parseDouble(jTextField3.getText());
Double acc=Double.parseDouble(jTextField4.getText());
Double math=Double.parseDouble(jTextField5.getText());
Double eco=Double.parseDouble(jTextField6.getText());
Double eng=Double.parseDouble(jTextField7.getText());
int bstin=Integer.parseInt(jTextField8.getText());
int accin=Integer.parseInt(jTextField9.getText());
```

```
int mathin=Integer.parseInt(jTextField10.getText());

int ecoin=Integer.parseInt(jTextField11.getText());

int engin=Integer.parseInt(jTextField12.getText());

      try

      { Class.forName("java.sql.DriverManager");

         Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");

         Statement stmt=(Statement) con.createStatement();

         String query="insert into commerce
values('"+name+"','"+sec+"','"+rno+"','"+bst+"','"+acc+"','"+math+"','"+eco+"','"+eng+"','"+bstin+"','"+acci
n+"','"+mathin+"','"+ecoin+"','"+engin+"');";

         stmt.executeUpdate(query);       }


      catch(Exception e)

      { JOptionPane.showMessageDialog(this,e.getMessage());    }

   }
```

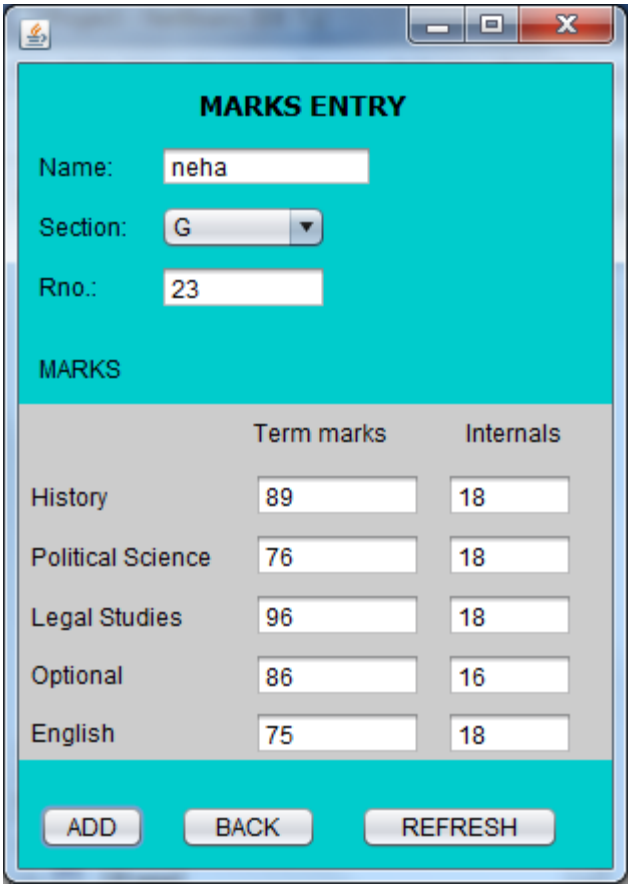
BACK BUTTON:

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

      this.setVisible(false);

      new home().setVisible(true);

   }
```

REFRESH BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

jTextField1.setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");
```

```
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jTextField11.setText("");
jTextField12.setText("");
    }
```



ADD BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
String name=jTextField1.getText();
String sec=String.valueOf(jComboBox1.getSelectedItem());
int rno=Integer.parseInt(jTextField2.getText());
Double his=Double.parseDouble(jTextField3.getText());
Double pol=Double.parseDouble(jTextField4.getText());
Double legal=Double.parseDouble(jTextField5.getText());
Double opt=Double.parseDouble(jTextField6.getText());
Double eng=Double.parseDouble(jTextField7.getText());
int hisin=Integer.parseInt(jTextField8.getText());
int polin=Integer.parseInt(jTextField9.getText());
```

```
int legin=Integer.parseInt(jTextField10.getText());

int optin=Integer.parseInt(jTextField11.getText());

int engin=Integer.parseInt(jTextField12.getText());

      try

      { Class.forName("java.sql.DriverManager");

         Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");

         Statement stmt=(Statement) con.createStatement();

         String query="insert into arts
values('"+name+"','"+sec+"','"+rno+"','"+his+"','"+pol+"','"+legal+"','"+opt+"','"+eng+"','"+hisin+"','"+polin
+"','"+legin+"','"+optin+"','"+engin+"');";

         stmt.executeUpdate(query);       }


      catch(Exception e)

      { JOptionPane.showMessageDialog(this,e.getMessage());    }

   }
```

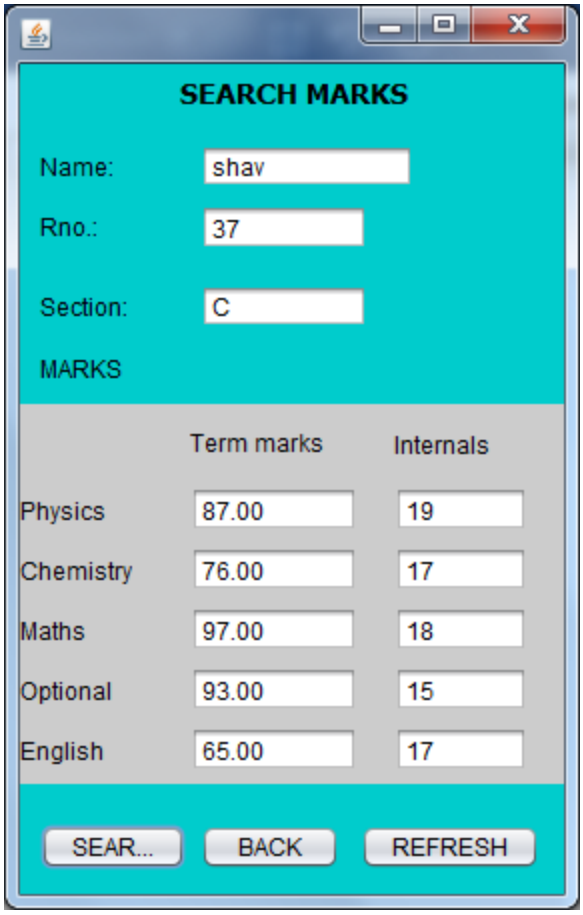
BACK BUTTON:

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

      this.setVisible(false);

      new home().setVisible(true);

   }
```

REFRESH BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

jTextField1.setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");
```

```
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jTextField11.setText("");
jTextField12.setText("");
    }
```



SEARCH BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        String name=jTextField1.getText();
        String rno=jTextField2.getText();


        try
        { Class.forName("java.sql.DriverManager");
            Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
            Statement stmt=(Statement) con.createStatement();
            String query="select * from science where name='"+name+"' and rno='"+rno+"';";
            ResultSet rs=stmt.executeQuery(query);
```

```
if(rs.next())
{String sec=rs.getString("section");
 String phy=rs.getString("phy");
 String chem=rs.getString("chem");
 String math=rs.getString("math");
 String opt=rs.getString("optional");
 String eng=rs.getString("english");
 String phyin=rs.getString("phyin");
 String chemin=rs.getString("chemin");
 String mathin=rs.getString("mathin");
 String optin=rs.getString("optin");
 String engin=rs.getString("engin");
 jTextField3.setText(sec);
 jTextField4.setText(phy);
 jTextField5.setText(chem);
 jTextField6.setText(math);
 jTextField7.setText(opt);
 jTextField8.setText(eng);
 jTextField9.setText(phyin);
 jTextField10.setText(chemin);
 jTextField11.setText(mathin);
 jTextField12.setText(optin);
 jTextField13.setText(engin);
  }

 else
   JOptionPane.showMessageDialog(null,"no such record");
```

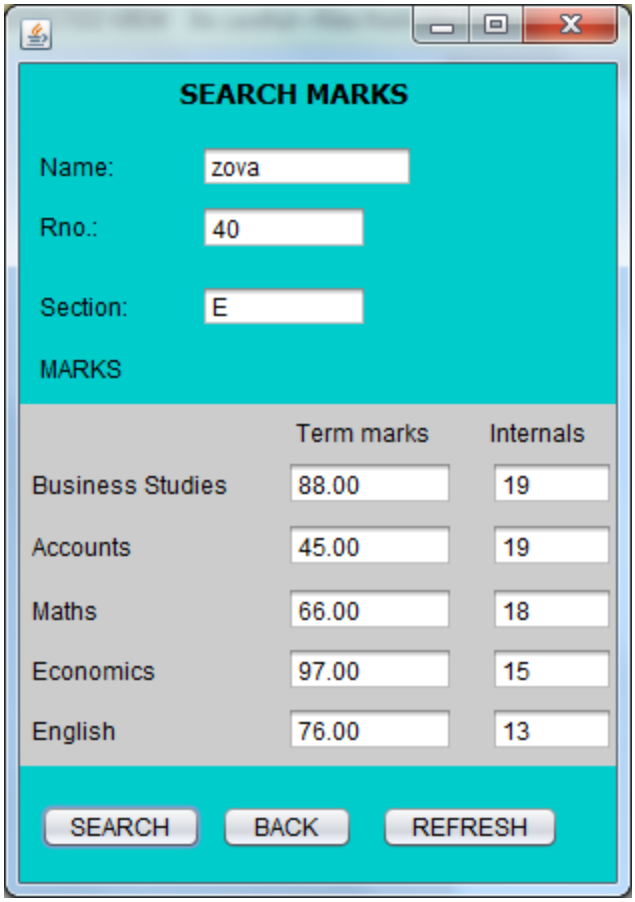
```
}
      catch(Exception e)
       { JOptionPane.showMessageDialog(this,e.getMessage());    }


   }
```

BACK BUTTON:

```
   private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
       this.setVisible(false);
       new home().setVisible(true);
   }
```

REFRESH BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField4.setText("");
jTextField5.setText("");
jTextField6.setText("");
jTextField7.setText("");
jTextField8.setText("");
jTextField9.setText("");
jTextField10.setText("");
jTextField11.setText("");
jTextField12.setText("");
jTextField13.setText("");    }
```



SEARCH BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        String name=jTextField1.getText();
        String rno=jTextField2.getText();


        try
        { Class.forName("java.sql.DriverManager");
            Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
            Statement stmt=(Statement) con.createStatement();
            String query="select * from commerce where name='"+name+"' and rno='"+rno+"';";
            stmt.executeUpdate(query);
```

```
ResultSet rs=stmt.executeQuery(query);

if(rs.next())
{String sec=rs.getString("section");
   String bst=rs.getString("bst");
   String acc=rs.getString("acc");
   String math=rs.getString("math");
   String eco=rs.getString("eco");
   String eng=rs.getString("english");
   String bstin=rs.getString("bstin");
   String accin=rs.getString("accin");
   String mathin=rs.getString("mathin");
   String ecoin=rs.getString("ecoin");
   String engin=rs.getString("engin");
   jTextField3.setText(sec);
   jTextField4.setText(bst);
   jTextField5.setText(acc);
   jTextField6.setText(math);
   jTextField7.setText(eco);
   jTextField8.setText(eng);
   jTextField9.setText(bstin);
   jTextField10.setText(accin);
   jTextField11.setText(mathin);
   jTextField12.setText(ecoin);
   jTextField13.setText(engin);
    }

else
```

```
        JOptionPane.showMessageDialog(null,"no such record");
      }
      catch(Exception e)
      { JOptionPane.showMessageDialog(this,e.getMessage());    }

  }
```

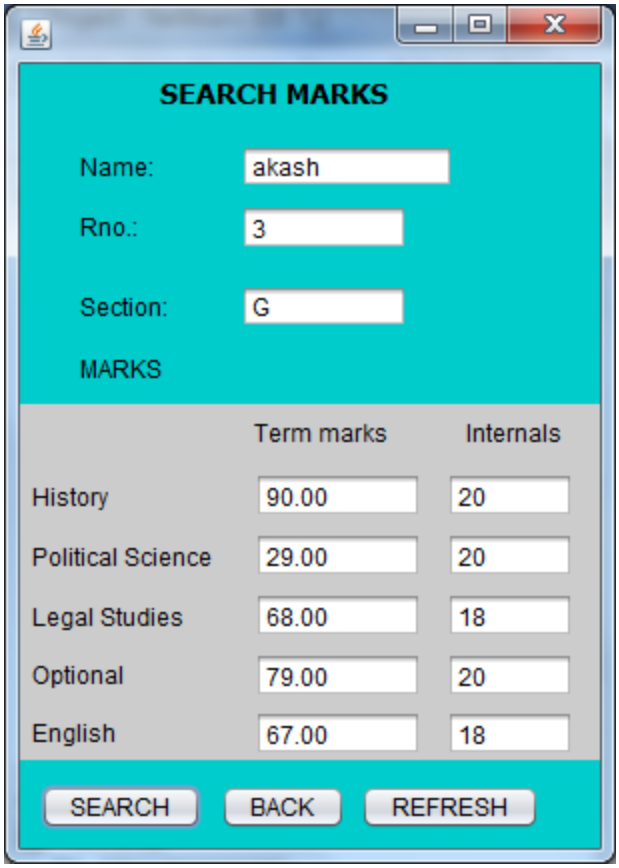
BACK BUTTON:

```
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
      this.setVisible(false);
      new home().setVisible(true);
  }
```

REFRESH BUTTON:

```
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
      jTextField1.setText("");
      jTextField2.setText("");
      jTextField3.setText("");
      jTextField4.setText("");
      jTextField5.setText("");
      jTextField6.setText("");
      jTextField7.setText("");
      jTextField8.setText("");
      jTextField9.setText("");
      jTextField10.setText("");
      jTextField11.setText("");
      jTextField12.setText("");
      jTextField13.setText("");
```

```
}
```



SEARCH BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        String name=jTextField1.getText();
        String rno=jTextField2.getText();


        try
        { Class.forName("java.sql.DriverManager");
            Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
            Statement stmt=(Statement) con.createStatement();
            String query="select * from arts where name='"+name+"' and rno='"+rno+"';" ;
            stmt.executeUpdate(query);
            ResultSet rs=stmt.executeQuery(query);
```

```
if(rs.next())
{String sec=rs.getString("section");
   String hist=rs.getString("hist");
   String polsc=rs.getString("polsc");
   String legal=rs.getString("legal");
   String opt=rs.getString("optional");
   String eng=rs.getString("english");
   String histin=rs.getString("hisin");
   String polscin=rs.getString("polin");
   String legalin=rs.getString("legin");
   String optin=rs.getString("optin");
   String engin=rs.getString("engin");
   jTextField3.setText(sec);
   jTextField4.setText(hist);
   jTextField5.setText(polsc);
   jTextField6.setText(legal);
   jTextField7.setText(opt);
   jTextField8.setText(eng);
   jTextField4.setText(histin);
   jTextField5.setText(polscin);
   jTextField6.setText(legalin);
   jTextField7.setText(optin);
   jTextField8.setText(engin);
     }

else
JOptionPane.showMessageDialog(null,"no such record");
```

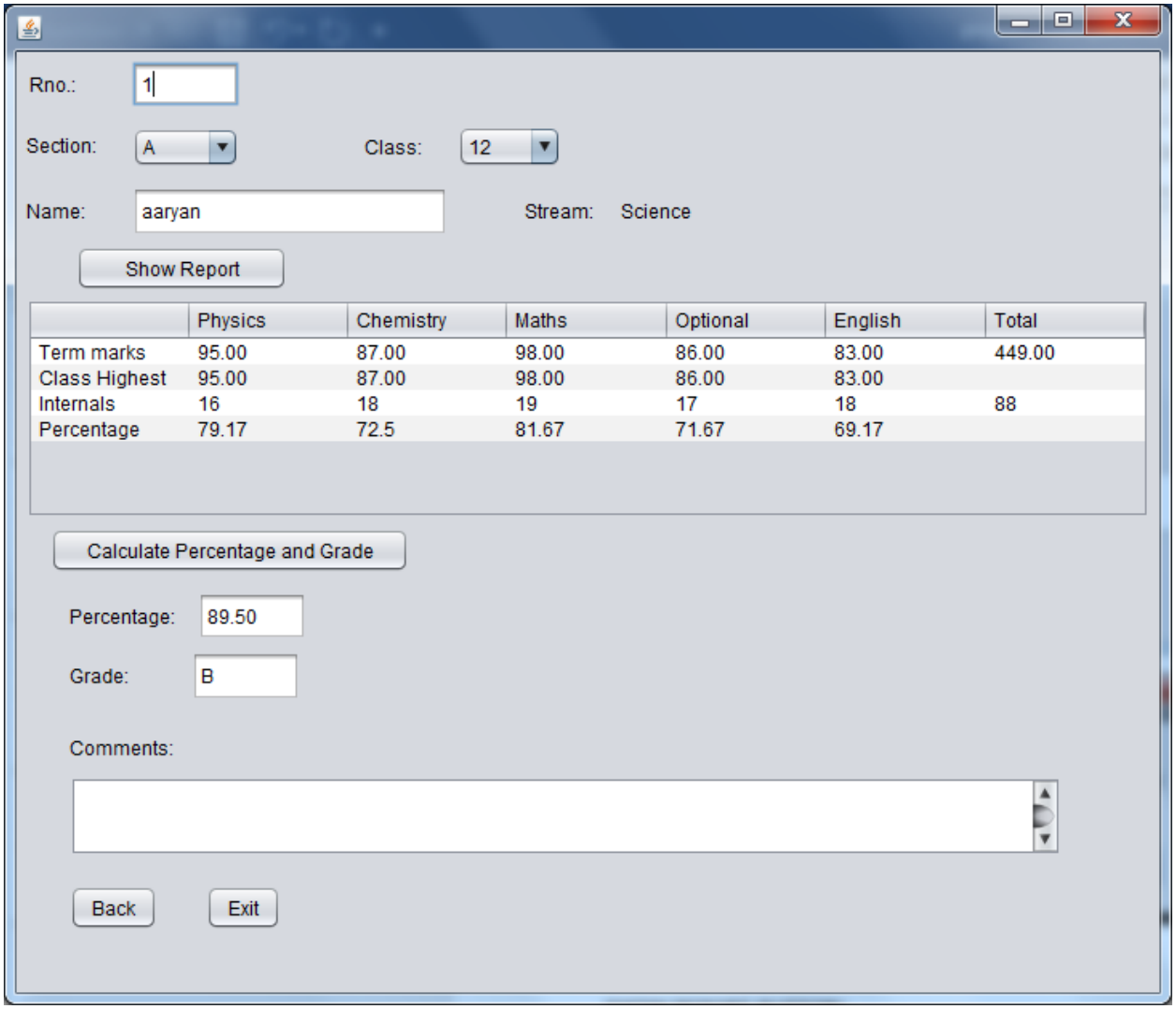
```
    }
    catch(Exception e)
    { JOptionPane.showMessageDialog(this,e.getMessage());    }

  }
```

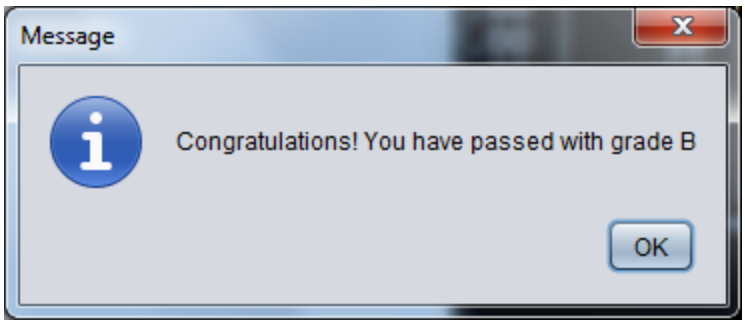
BACK BUTTON:

```
  private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    this.setVisible(false);
    new home().setVisible(true);
  }
```

REFRESH BUTTON:

```
  private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    jTextField1.setText("");
    jTextField2.setText("");
    jTextField3.setText("");
    jTextField4.setText("");
    jTextField5.setText("");
    jTextField6.setText("");
    jTextField7.setText("");
    jTextField8.setText("");
    jTextField9.setText("");
    jTextField10.setText("");
    jTextField11.setText("");
    jTextField12.setText("");
    jTextField13.setText("");
  }
```





SHOW REPORT BUTTON:

```
    private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
DefaultTableModel mod=(DefaultTableModel)jTable1.getModel();
```

```
try
{Class.forName("java.sql.DriverManager");
 Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
 Statement stmt=(Statement) con.createStatement();
 int rno=Integer.parseInt(jTextField4.getText());
 String sec=String.valueOf(jComboBox1.getSelectedItem());
 String query="Select *,(phy+chem+math+optional+english) as
total,(phyin+chemin+mathin+optin+engin) as
totalin,max(phy),max(chem),max(math),max(optional),max(english) from science where rno='"+rno+"'
and section='"+sec+"';";
 ResultSet rs=stmt.executeQuery(query);

 while(rs.next())
 { String name=rs.getString("Name");
   String phy=rs.getString("phy");
   String chem=rs.getString("chem");
   String math=rs.getString("math");
   String opt=rs.getString("optional");
   String eng=rs.getString("english");
   String total=rs.getString("total");
   String mphy=rs.getString("max(phy)");
   String mchem=rs.getString("max(chem)");
   String mmath=rs.getString("max(math)");
   String mopt=rs.getString("max(optional)");
   String meng=rs.getString("max(english)");
   String phyin=rs.getString("phyin");
   String chemin=rs.getString("chemin");
   String mathin=rs.getString("mathin");
   String optin=rs.getString("optin");
```

```
  String engin=rs.getString("engin");
  String totalin=rs.getString("totalin");
  String pphy=String.valueOf(Math.round((Double.parseDouble(phy+phyin)/1.2)*100)/100.0);
  String pchem=String.valueOf(Math.round((Double.parseDouble(chem+chemin)/1.2)*100)/100.0);
  String pmath=String.valueOf(Math.round((Double.parseDouble(math+mathin)/1.2)*100)/100.0);
  String popt=String.valueOf(Math.round((Double.parseDouble(opt+optin)/1.2)*100)/100.0);
  String peng=String.valueOf(Math.round((Double.parseDouble(eng+engin)/1.2)*100)/100.0);

  jTextField1.setText(name);
  mod.addRow(new Object[] {"Term marks",phy,chem,math,opt,eng,total});
  mod.addRow(new Object[] {"Class Highest",mphy,mchem,mmath,mopt,meng,""});
  mod.addRow(new Object[] {"Internals",phyin,chemin,mathin,optin,engin,totalin});
  mod.addRow(new Object[] {"Percentage",pphy,pchem,pmath,popt,peng,""});
 }
       }
catch (Exception e)
{JOptionPane.showMessageDialog(this,e.getMessage());}
   }
```

CALCULATE PERCENTAGE AND GRADE BUTTON:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
try
{Class.forName("java.sql.DriverManager");
 Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
 Statement stmt=(Statement) con.createStatement();
 int rno=Integer.parseInt(jTextField4.getText());
 String sec=String.valueOf(jComboBox1.getSelectedItem());
```

```
 String query="Select (phy+chem+math+optional+english+phyin+chemin+mathin+optin+engin)/6 as percentage from science where rno='"+rno+"' and section='"+sec+"';";
 ResultSet rs=stmt.executeQuery(query);


  while(rs.next())
 {   String per=rs.getString("Percentage");
     jTextField2.setText(per);   }
}
 catch (Exception e)
{JOptionPane.showMessageDialog(this,e.getMessage());}

double percent=Double.parseDouble(jTextField2.getText());
char grade;
if(percent>90.0)
{    grade='A';  }
else if(percent>80.0)
{    grade='B';  }
else if(percent>70.0)
{    grade='C';  }
else if(percent>30.0)
{    grade='D';  }
else
{    grade='F';  }
jTextField3.setText(""+grade);

if(grade=='F')
JOptionPane.showMessageDialog(null,"Sorry,You have failed with grade F");
else
JOptionPane.showMessageDialog(null,"Congratulations! You have passed with grade "+grade);
```

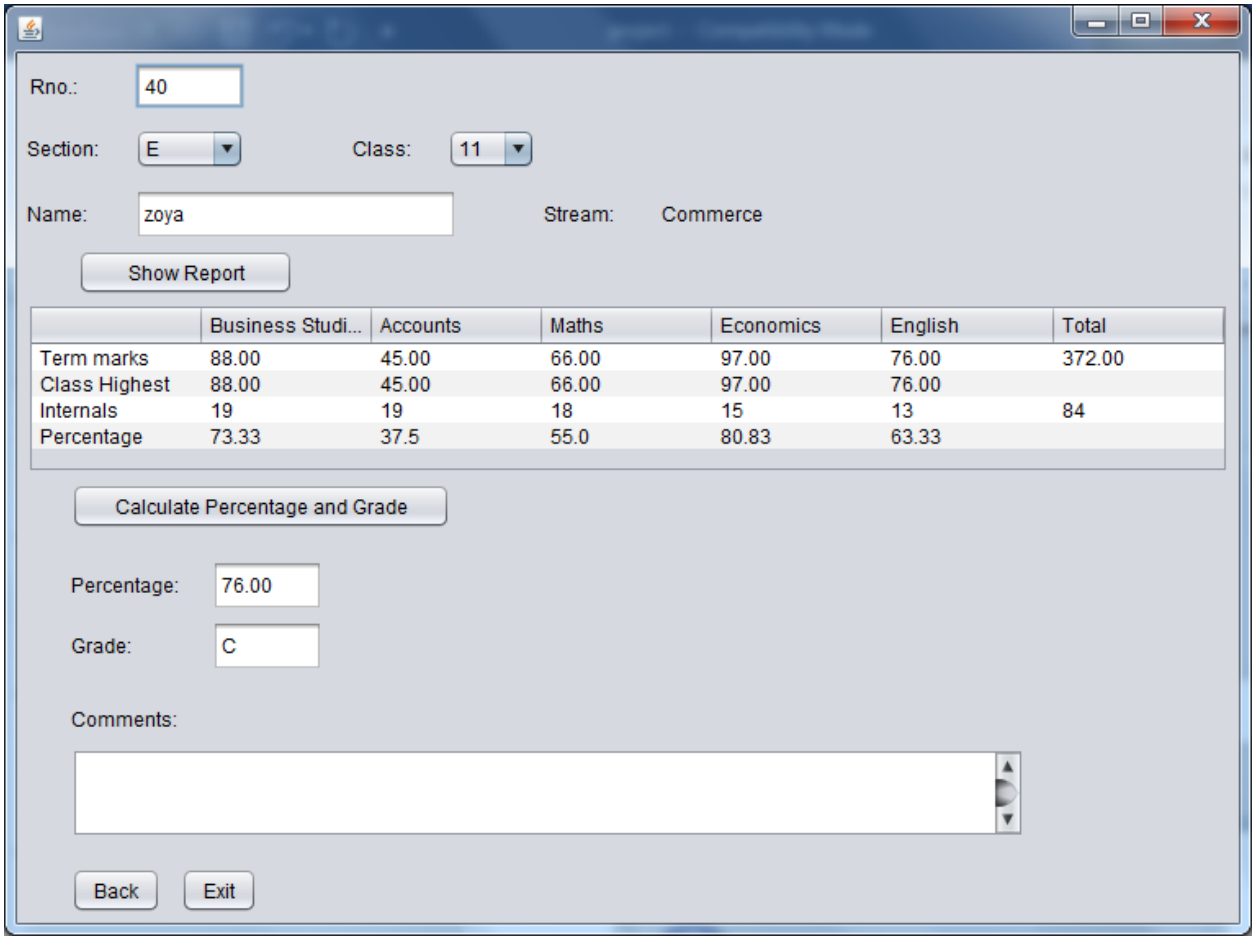
```
    }
```

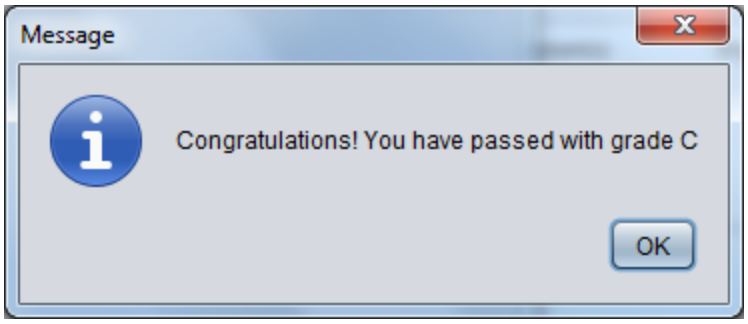
BACK BUTTON:

```
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
this.setVisible(false);
new home().setVisible(true);
    }
```

EXIT BUTTON:

```
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
System.exit(0);
    }
```





SHOW REPORT BUTTON:

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    DefaultTableModel mod=(DefaultTableModel)jTable1.getModel();
    try
    {Class.forName("java.sql.DriverManager");
```

```
        Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");

        Statement stmt=(Statement) con.createStatement();

        int rno=Integer.parseInt(jTextField4.getText());

        String sec=String.valueOf(jComboBox1.getSelectedItem());

        String query="Select *,(bst+acc+math+eco+english) as total,(bstin+accin+mathin+ecoin+engin) as
totalin,max(bst),max(acc),max(math),max(eco),max(english) from commerce where rno='"+rno+"' and
section='"+sec+"';";

        ResultSet rs=stmt.executeQuery(query);


        while(rs.next())

        { String name=rs.getString("Name");

           String bst=rs.getString("bst");

           String acc=rs.getString("acc");

           String math=rs.getString("math");

           String eco=rs.getString("eco");

           String eng=rs.getString("english");

           String total=rs.getString("total");

           String mbst=rs.getString("max(bst)");

           String macc=rs.getString("max(acc)");

           String mmath=rs.getString("max(math)");

           String meco=rs.getString("max(eco)");

           String meng=rs.getString("max(english)");

           String bstin=rs.getString("bstin");

           String accin=rs.getString("accin");

           String mathin=rs.getString("mathin");

           String ecoin=rs.getString("ecoin");

           String engin=rs.getString("engin");

           String totalin=rs.getString("totalin");
```

```
            String pbst=String.valueOf(Math.round((Double.parseDouble(bst+bstin)/1.2)*100)/100.0);
            String pacc=String.valueOf(Math.round((Double.parseDouble(acc+accin)/1.2)*100)/100.0);
            String
pmath=String.valueOf(Math.round((Double.parseDouble(math+mathin)/1.2)*100)/100.0);
            String peco=String.valueOf(Math.round((Double.parseDouble(eco+ecoin)/1.2)*100)/100.0);
            String peng=String.valueOf(Math.round((Double.parseDouble(eng+engin)/1.2)*100)/100.0);


            jTextField1.setText(name);
            mod.addRow(new Object[] {"Term marks",bst,acc,math,eco,eng,total});
            mod.addRow(new Object[] {"Class Highest",mbst,macc,mmath,meco,meng,""});
            mod.addRow(new Object[] {"Internals",bstin,accin,mathin,ecoin,engin,totalin});
            mod.addRow(new Object[] {"Percentage",pbst,pacc,pmath,peco,peng,""});
          }
       }
       catch (Exception e)
       {JOptionPane.showMessageDialog(this,e.getMessage());}
    }
```

CALCULATE PERCENTAGE AND GRADE BUTTON:

```
    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
       try
       {Class.forName("java.sql.DriverManager");
          Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
          Statement stmt=(Statement) con.createStatement();
          int rno=Integer.parseInt(jTextField4.getText());
          String sec=String.valueOf(jComboBox1.getSelectedItem());
          String query="Select (bst+acc+maths+eco+english+bstin+accin+mathin+ecoin+engin)/6 as
percentage from commerce where rno='"+rno+"' and section='"+sec+"';";
```

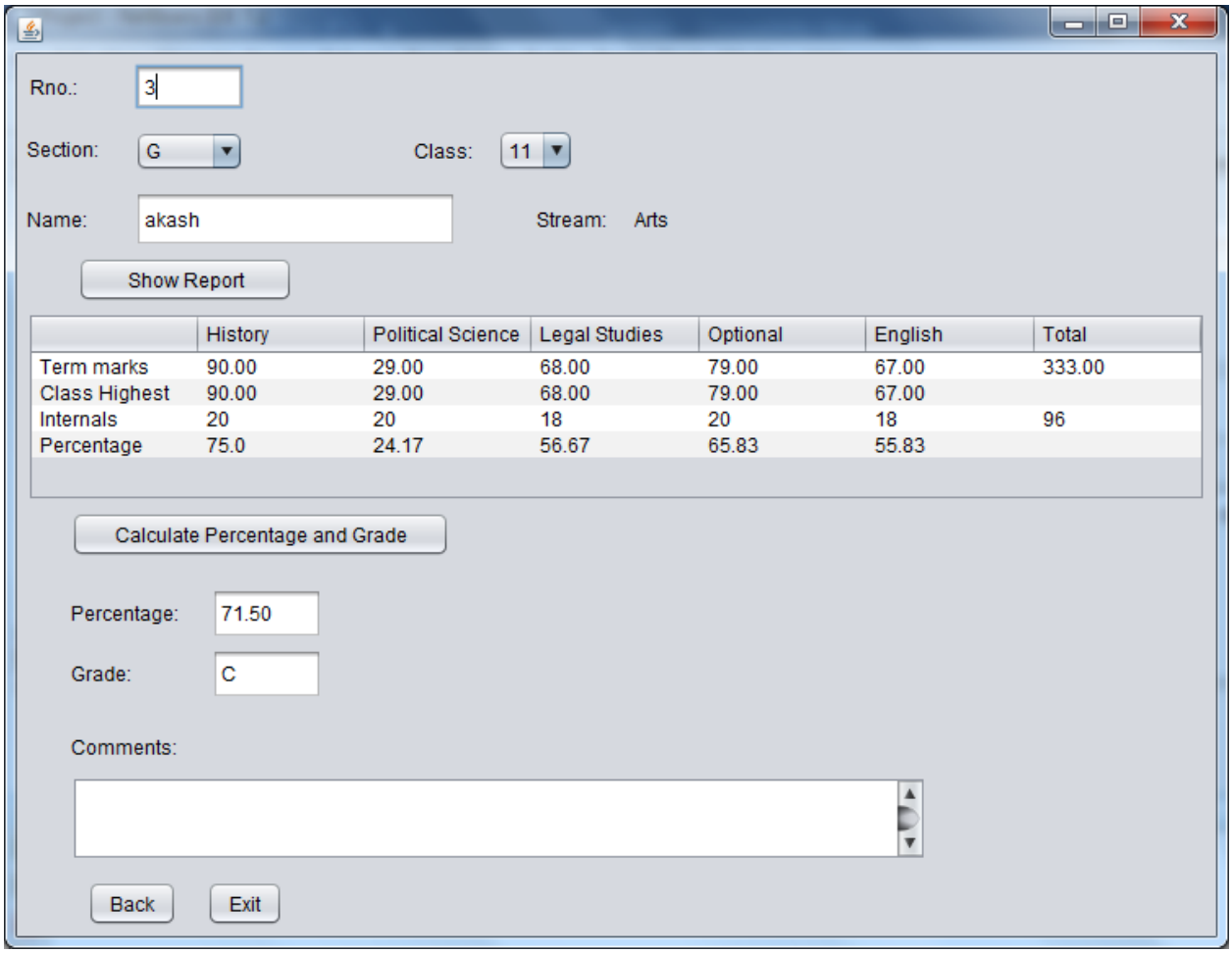
```
    ResultSet rs=stmt.executeQuery(query);

    while(rs.next())
    {   String per=rs.getString("Percentage");
        jTextField2.setText(per);   }
  }
  catch (Exception e)
  {JOptionPane.showMessageDialog(this,e.getMessage());}

  double percent=Double.parseDouble(jTextField2.getText());
  char grade;
  if(percent>90)
  {   grade='A';  }
  else if(percent>80)
  {   grade='B';  }
  else if(percent>70)
  {   grade='C';  }
  else if(percent>30)
  {   grade='D';  }
  else
  {   grade='F';  }
  jTextField3.setText(""+grade);

  if(grade=='F')
  JOptionPane.showMessageDialog(null,"Sorry,You have failed with grade F");
  else
  JOptionPane.showMessageDialog(null,"Congratulations! You have passed with grade "+grade);
}
```

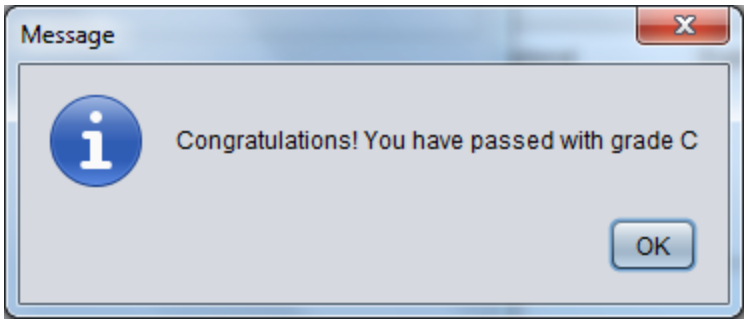
BACK BUTTON:

```
   private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
this.setVisible(false);
new home().setVisible(true);
   }
```

EXIT BUTTON:

```
   private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
System.exit(0);
   }
```





SHOW REPORT BUTTON:

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
    DefaultTableModel mod=(DefaultTableModel)jTable1.getModel();
    try
    {Class.forName("java.sql.DriverManager");
```

```
        Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");

        Statement stmt=(Statement) con.createStatement();

        int rno=Integer.parseInt(jTextField1.getText());

        String sec=String.valueOf(jComboBox1.getSelectedItem());

        String query="Select *,(hist+polsc+legal+optional+english) as
total,(hisin+polin+legin+optin+engin) as
totalin,max(hist),max(polsc),max(legal),max(optional),max(english) from arts where rno='"+rno+"' and
section='"+sec+"';";

        ResultSet rs=stmt.executeQuery(query);


        while(rs.next())

        { String name=rs.getString("Name");

           String his=rs.getString("hist");

           String pol=rs.getString("polsc");

           String leg=rs.getString("legal");

           String opt=rs.getString("optional");

           String eng=rs.getString("english");

           String total=rs.getString("total");

           String mhis=rs.getString("max(hist)");

           String mpol=rs.getString("max(polsc)");

           String mleg=rs.getString("max(legal)");

           String mopt=rs.getString("max(optional)");

           String meng=rs.getString("max(english)");

           String hisin=rs.getString("hisin");

           String polin=rs.getString("polin");

           String legin=rs.getString("legin");

           String optin=rs.getString("optin");

           String engin=rs.getString("engin");

           String totalin=rs.getString("totalin");
```

```
            String phis=String.valueOf(Math.round((Double.parseDouble(his+hisin)/1.2)*100)/100.0);
            String ppol=String.valueOf(Math.round((Double.parseDouble(pol+polin)/1.2)*100)/100.0);
            String pleg=String.valueOf(Math.round((Double.parseDouble(leg+legin)/1.2)*100)/100.0);
            String popt=String.valueOf(Math.round((Double.parseDouble(opt+optin)/1.2)*100)/100.0);
            String peng=String.valueOf(Math.round((Double.parseDouble(eng+engin)/1.2)*100)/100.0);

            jTextField1.setText(name);
            mod.addRow(new Object[] {"Term marks",his,pol,leg,opt,eng,total});
            mod.addRow(new Object[] {"Class Highest",mhis,mpol,mleg,mopt,meng,""});
            mod.addRow(new Object[] {"Internals",hisin,polin,legin,optin,engin,totalin});
            mod.addRow(new Object[] {"Percentage",phis,ppol,pleg,popt,peng,""});
        }
    }
    catch (Exception e)
    {JOptionPane.showMessageDialog(this,e.getMessage());}
  }
```

CALCULATE PERCENTAGE AND GRADE BUTTON:

```
  private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try
    {Class.forName("java.sql.DriverManager");
        Connection con=(Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/riya","root","");
        Statement stmt=(Statement) con.createStatement();
        int rno=Integer.parseInt(jTextField4.getText());
        String sec=String.valueOf(jComboBox1.getSelectedItem());
        String query="Select (hist+polsc+legal+optional+english+hisin+polin+legin+optin+engin)/6 as
percentage from arts where rno='"+rno+"' and section='"+sec+"';";
        ResultSet rs=stmt.executeQuery(query);
```

```
        while(rs.next())
        {   String per=rs.getString("Percentage");
            jTextField2.setText(per);   }
    }
    catch (Exception e)
    {JOptionPane.showMessageDialog(this,e.getMessage());}

    double percent=Double.parseDouble(jTextField2.getText());
    char grade;
    if(percent>90)
    {    grade='A';  }
    else if(percent>80)
    {    grade='B';  }
    else if(percent>70)
    {    grade='C';  }
    else if(percent>30)
    {    grade='D';  }
    else
    {    grade='F';  }
    jTextField3.setText(""+grade);

    if(grade=='F')
    JOptionPane.showMessageDialog(null,"Sorry,You have failed with grade F");
    else
    JOptionPane.showMessageDialog(null,"Congratulations! You have passed with grade "+grade);
}
```

BACK BUTTON:

```
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
this.setVisible(false);
new home().setVisible(true);
    }
```

EXIT BUTTON:

```
    private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
System.exit(0);
    }
```

SCOPE OF THE PROJECT

This project would help to make the system of marks management easy for teachers. Teachers can login or register as a new account. The program can be used to enter the student's marks and maintain a database in the form of tables based on different streams. Teachers can also view the marks of a child by entering the name and rollno. Furthermore, a report card can be generated showing the marks in a tabular form where percentage and grade are also calculated.

BIBLIOGRAPHY

- Informatics Practices NCERT
- Netbeans.org
- Google.com
- Mysql.com