

```
package view;
```

```
import java.awt.event.ActionEvent;
```

```
public class Uiview {  
    protected static final Object[][] String = null;
```

```
public Uiview(){  
    JFrame f= new JFrame("student");  
    JLabel lb= new JLabel("Name: ");  
    lb.setBounds(50,40,100,40);  
    JTextField tx=new JTextField();  
    tx.setBounds(50, 80, 120, 40);  
    JLabel lb1=new JLabel("Address: ");  
    lb1.setBounds(300, 40, 100, 40);  
    JTextField tx1=new JTextField();  
    tx1.setBounds(300, 80, 230, 80);  
    JLabel lb2= new JLabel("Roll: ");  
    lb2.setBounds(600,40,120,40);  
    JTextField tx2=new JTextField();  
    tx2.setBounds(600,80,80,40);  
    JButton b=new JButton("Insert");  
    b.setBounds(50, 300, 80, 40);  
    JButton b1=new JButton("Update");  
    b1.setBounds(200,300, 80, 40);  
    JButton b2=new JButton("Delete");  
    b2.setBounds(350, 300, 80, 40);  
    JButton b3=new JButton("Shows");  
    b3.setBounds(500,300,80,40);  
    JButton b4=new JButton("Search");  
    b4.setBounds(650, 300, 80, 40);  
  
    b.addActionListener(new ActionListener(){  
        @Override  
        public void actionPerformed(ActionEvent arg0) {  
            String name=tx.getText();  
            String address=tx1.getText();  
            int roll=Integer.parseInt(tx2.getText());  
  
            Student s= new Student(roll,name,address);  
            try{  
                int a=new Student_Swing().insert(s);  
                if(a>0)  
                {  
                    JOptionPane.showMessageDialog(f, "Data inserted");  
                }  
            }  
            catch(ClassNotFoundException | SQLException e1)  
            {  
                e1.printStackTrace();  
            }  
        }  
    });  
  
    b1.addActionListener(new ActionListener(){  
        @Override  
        public void actionPerformed(ActionEvent arg0) {  
            String name=tx.getText();  
            String address=tx1.getText();  
            int roll=Integer.parseInt(tx2.getText());  
        }  
    });  
}
```

```

74         String address=tx1.getText();
75         int roll=Integer.parseInt(tx2.getText());
76
77         Student s= new Student(roll,name,address);
78         try{
79             int a=new Student_Swing().update(s);
80             if(a>0)
81             {
82                 JOptionPane.showMessageDialog(f, "Data Update");
83             }
84         }
85         catch(ClassNotFoundException | SQLException e1)
86         {
87             e1.printStackTrace();
88         }
89     }
90 }
91 b2.addActionListener(new ActionListener(){
92     @Override
93     public void actionPerformed(ActionEvent arg0) {
94         int roll=Integer.parseInt(tx2.getText());
95         Student s= new Student(roll);
96         try{
97             int a=new Student_Swing().delete(s);
98             if(a>0)
99             {
100                 JOptionPane.showMessageDialog(f, "Data Delete");
101             }
102         }
103         catch(ClassNotFoundException | SQLException e1)
104         {
105             e1.printStackTrace();
106         }
107     }
108 }
109 b3.addActionListener(new ActionListener() {}
110 b4.addActionListener(new ActionListener(){
111     public void actionPerformed(ActionEvent arg0) {
112         try {
113
114             int len= new Student_Swing().len();
115             System.out.println(len);
116             int roll=Integer.parseInt(tx2.getText());
117             Student s= new Student(roll);
118             ResultSet rs = new Student_Swing().st1(s);
119             String[][] data = new String[len][3]; // Assuming max 10 rows for simp.
120             int row = 0;
121
122             while (rs.next()) {
123                 data[row][0] = rs.getString(1);
124                 data[row][1] = rs.getString(2);
125                 data[row][2] = rs.getString(3);
126                 row++;
127             }
128
129             String[] column = {"Roll", "Name", "Address"};
130             JTable jt = new JTable(data,column);
131             jt.setBounds(25, 600, 700, 600);
132             JScrollPane sp=new JScrollPane(jt);
133
134             f.add(sp);
135             f.add(jt);
136             // Ensure the frame refreshes to show the table

```

```

185         e1.printStackTrace();
186     }
187 }
188 });
189 b3.addActionListener(new ActionListener() {[]
141 b4.addActionListener(new ActionListener(){
142     public void actionPerformed(ActionEvent arg0) {
143         try {
144
145             int len= new Student_Swing().len();
146             System.out.println(len);
147             int roll=Integer.parseInt(tx2.getText());
148             Student s= new Student(roll);
149             ResultSet rs = new Student_Swing().st1(s);
150             String[][] data = new String[len][3]; // Assuming max 10 rows for simplicity
151             int row = 0;
152
153             while (rs.next()) {
154                 data[row][0] = rs.getString(1);
155                 data[row][1] = rs.getString(2);
156                 data[row][2] = rs.getString(3);
157                 row++;
158             }
159
160             String[] column = {"Roll", "Name", "Address"};
161             JTable jt = new JTable(data,column);
162             jt.setBounds(25, 600, 700, 600);
163             JScrollPane sp=new JScrollPane(jt);
164
165             f.add(sp);
166             f.add(jt);
167             // Ensure the frame refreshes to show the table
168
169         } catch (ClassNotFoundException | SQLException e) {
170             e.printStackTrace();
171         }
172     }
173 });
174
175 // f.add(sp);
176 f.add(b4);
177 f.add(b3);
178 f.add(b2);
179 f.add(b1);
180 f.add(b);
181 f.add(tx2);
182 f.add(lb2);
183 f.add(tx1);
184 f.add(lb1);
185 f.add(lb);
186 f.add(tx);
187 f.setSize(800,1000);
188 f.setLayout(null);
189 f.setVisible(true);
190
191 }
192
193 public static void main(String args[])
194 {
195     new Uiview();
196 }
197 }
198

```

```
1 package model;
2
3 public class Student {
4     private int roll;
5     private String name;
6     private String address;
7
8     public String getAddress() {
9         return address;
10    }
11    // public void setAddress(String address) {
12    //     this.address = address;
13    // }
14    public String getName() {
15        return name;
16    }
17    // public void setName(String name) {
18    //     this.name = name;
19    // }
20    public int getRoll() {
21        return roll;
22    }
23    // public void setRoll(int roll) {
24    //     this.roll = roll;
25    // }
26    public Student(int roll)
27    {
28        super();
29        this.roll = roll;
30    }
31
32    public Student(String name, String address)
33    {
34        super();
35        this.name = name;
36        this.address = address;
37    }
38    public Student(int roll, String name, String address) {
39        super();
40        this.roll = roll;
41        this.name = name;
42        this.address = address;
43    }
44
```

Uiview.java Student.java Student_Swing.java

```
1 package controller;
2 import java.sql.Connection;
9
10 public class Student_Swing {
11     public Connection connect() throws ClassNotFoundException, SQLException
12     {
13         Class.forName("com.mysql.cj.jdbc.Driver");
14         Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/collegess","root","Akaremore@47");
15         return con;
16     }
17
18     public int insert(Student s) throws ClassNotFoundException, SQLException {
19         Connection cn= connect();
20         PreparedStatement stmt= cn.prepareStatement("INSERT INTO student(name,address,roll)  VALUE (?,?,?)");
21         stmt.setString(1,s.getName());
22         stmt.setString(2,s.getAddress());
23         stmt.setInt(3, s.getRoll());
24         int a=stmt.executeUpdate();
25         return a;
26     }
27     public int update(Student s) throws ClassNotFoundException, SQLException
28     {
29         Connection cn= connect();
30         PreparedStatement stmt=cn.prepareStatement("UPDATE student SET name=?, address=? WHERE roll="+s.getRoll()+"");
31         stmt.setString(1,s.getName());
32         stmt.setString(2,s.getAddress());
33         int a=stmt.executeUpdate();
34         return a;
35     }
36     public int delete(Student s) throws ClassNotFoundException, SQLException
```

Package Explorer

- > Collection minproject
- > day3 p5
- > ndndndnd
- > Prepared Statement Dbs
- ✓ Swing student package
 - src
 - controller
 - Student_Swing.java
 - model
 - Student.java
 - view
 - Uiview.java
 - > JRE System Library [JavaSE-1.8]
 - > Referenced Libraries

```

Uiview.java  Student.java  Student_Swing.java
60      int j=0;
61      while(rs.next())
62      {
63          j=rs.getInt(1);
64      }
65      return j;
66  }
67  // public int len1(Student s) throws ClassNotFoundException, SQLException
68  // {
69  //     Connection cn=connect();
70  //     PreparedStatement stmt=cn.prepareStatement("SELECT roll FROM student WHERE roll="+s.getRoll()+"");
71  //     ResultSet rs=stmt.executeQuery();
72  //     int j=0;
73  //     while(rs.next())
74  //     {
75  //         j=rs.getInt(1);
76  //     }
77  //     return j;
78  // }
79
80  public ResultSet st1(Student s) throws ClassNotFoundException, SQLException{
81      Connection cn=connect();
82      PreparedStatement stmt= cn.prepareStatement("SELECT * FROM student WHERE roll="+s.getRoll()+"");
83      ResultSet rs=stmt.executeQuery();
84      return rs;
85  }
86  }
87
88 }
89

```

```
1 • create database collegess;
2 • use collegess;
3 • create table student(
4     roll int unique not null,
5     name varchar(30),
6     address varchar(100),
7     id int primary key auto_increment
8 );
9
10 • INSERT INTO student(roll, name, address) VALUES
11     (8,"Atharva","nagpure"),
12     (1, 'Alice Johnson', '123 Main St, Springfield'),
13     (2, 'Bob Smith', '456 Oak Ave, Springfield'),
14     (3, 'Charlie Brown', '789 Pine St, Springfield'),
15     (4, 'Diana Prince', '101 Maple St, Springfield'),
16     (5, 'Ethan Hunt', '202 Birch St, Springfield');
17
18 • INSERT INTO student(roll, name, address) VALUES
19     (6, 'Ethaadsadasad Hunt', '202 Birch St, Springfield');
20 • select * from student;
```

Name:

Address:

Roll:

Insert

Update

Delete

Shows

Search

Message



Data Delete

OK

Result Grid



Filter Rows:

Edit:



	roll	name	address	id
▶	2	Bob Smith	456 Oak Ave, Springfield	2
	3	Charlie Brown	789 Pine St, Springfield	3
	4	Diana Prince	101 Maple St, Springfield	4
	5	Ethan Hunt	202 Birch St, Springfield	5
	8	Atharva	nagpure	6
	111	bbbb	bbbv	7
	11111	atharva	nagpur	9
	6	atharva karemore	nagpur	10
	23323	kkkkkkk	jnnjnnjnnjnn	11
	2222	atharva karemore	nagpur	12
▲	NULL	NULL	NULL	NULL

Name:

Atharva N. karemore

Address:

Nagpure

Roll:

144

Insert

Update

Delete

Shows

Search

Message



Data inserted

OK

	roll	name	address	id
	2	Bob Smith	456 Oak Ave, Springfield	2
	3	Charlie Brown	789 Pine St, Springfield	3
	4	Diana Prince	101 Maple St, Springfield	4
	5	Ethan Hunt	202 Birch St, Springfield	5
	8	Atharva	nagpure	6
	111	bbbb	bbbv	7
	11111	atharva	nagpur	9
	6	atharva karemore	nagpur	10
	23323	kkkkkkk	jjnjnnjnjn	11
	2222	atharva karemore	nagpur	12
	144	Atharva N. kare...	Nagpure	13
	NULL	NULL	NULL	NULL

Name:

atharva

Address:

mumbai

Roll:

2222

Insert

Update

Delete

Shows

Search

Message



Data Update

OK

	roll	name	address	id
	2	Bob Smith	456 Oak Ave, Springfield	2
	3	Charlie Brown	789 Pine St, Springfield	3
	4	Diana Prince	101 Maple St, Springfield	4
	5	Ethan Hunt	202 Birch St, Springfield	5
	8	Atharva	nagpure	6
	111	bbbb	bbbv	7
	11111	atharva	nagpur	9
	6	atharva karemore	nagpur	10
	23323	kkkkkkkk	jjnjnnjnjn	11
	2222	atharva	mumbai	12
	ROLL	NAME	ADDRESS	ID

Name:

Address:

Roll:

Insert

Update

Delete

Shows

Search

2	Bob Smith	456 Oak Ave, Springfield
3	Charlie Brown	789 Pine St, Springfield
4	Diana Prince	101 Maple St, Springfield
5	Ethan Hunt	202 Birch St, Springfield
8	Atharva	nagpure
111	bbbb	bbbv
11111	atharva	nagpur
6	atharva karemore	nagpur
23323	kkkkkkk	jjnjnnjnjn
2222	atharva	mumbai