

```

package Test;

import javax.swing.*.*;
import java.awt.*.*;
import java.awt.event.*;

class StudentExam extends WindowAdapter implements ActionListener {

    JFrame f;

    JLabel l1, l2, l3, l4, l5, l6, l7, l8, l9, l10;

    JComboBox<String> c1, c2;

    JTextField t1, t2, t3, t4, t5, t6, t7;

    JButton b1, b2;

    StudentExam(){
        init();
        f.setVisible(true);
        f.setSize(700, 600);
        f.setLayout(null);
        f.setTitle("StudentExam Calculation");
        location();
        addComponents();
    }

    public void init() {
        f = new JFrame();
        f.getContentPane();
        l1 = new JLabel("Name: ");
        l2 = new JLabel("Roll No.: ");
        l3 = new JLabel("Seat No.: ");
        l4 = new JLabel("Division: ");
        l5 = new JLabel("Department: ");
        l6 = new JLabel("Enter the marks obtained out of 100 : ");
    }

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l7 = new JLabel("Maths");
l8 = new JLabel("Physics");
l9 = new JLabel("Chemistry");
l10 = new JLabel("English");
t1 = new JTextField();
t2 = new JTextField();
t3 = new JTextField();
t4 = new JTextField();
t5 = new JTextField();
t6 = new JTextField();
t7 = new JTextField();
c1 = new JComboBox<>();
c2 = new JComboBox<>();
b1 = new JButton("Calculate");
b1.setBackground(new Color(200, 170, 190).brighter());
b2 = new JButton("Reset");
b2.setBackground(new Color(200, 170, 190).brighter());
}
```

```
public void addComponents() {
    f.addWindowListener(this);
    f.add(l1);
    f.add(l2);
    f.add(l3);
    f.add(t1);
    f.add(t2);
    f.add(t3);
    f.add(l4);
    f.add(l5);
    f.add(l6);
    f.add(c1);
```

```
f.add(c2);  
c1.setSelectedIndex(-1);  
c2.setSelectedIndex(-1);  
f.add(l7);  
f.add(l8);  
f.add(l9);  
f.add(l10);  
f.add(t4);  
f.add(t5);  
f.add(t6);  
f.add(t7);  
f.add(b1);  
f.add(b2);  
b1.addActionListener(this);  
b2.addActionListener(this);  
}
```

```
public void location() {  
    l1.setBounds(50, 40, 70, 30);  
    l1.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));  
    l2.setBounds(50, 90, 70, 30);  
    l2.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));  
    l3.setBounds(50, 140, 70, 30);  
    l3.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));  
    t1.setBounds(120, 40, 200, 30);  
    t2.setBounds(120, 90, 200, 30);  
    t3.setBounds(120, 140, 200, 30);  
    l4.setBounds(400, 40, 70, 30);  
    l4.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));  
    l5.setBounds(400, 90, 90, 30);  
    l5.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));  
}
```

```

l6.setBounds(200, 200, 250, 30);

l6.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));

c1.setBounds(500, 40, 90, 30);

c1.addItem("TE V");

c1.addItem("TE VI");

c1.addItem("TE VII");

c1.addItem("TE VIII");

c2.setBounds(500, 90, 90, 30);

c2.addItem("E&TC");

c2.addItem("CS");

c2.addItem("IT");

l7.setBounds(90, 250, 70, 30);

l7.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));

l8.setBounds(90, 310, 70, 30);

l8.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));

l9.setBounds(400, 250, 70, 30);

l9.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));

l10.setBounds(400, 310, 70, 30);

l10.setFont(new Font(Font.SANS_SERIF, Font.PLAIN, 14));

t4.setBounds(160, 250, 100, 30);

t5.setBounds(160, 310, 100, 30);

t6.setBounds(470, 250, 100, 30);

t7.setBounds(470, 310, 100, 30);

b1.setBounds(160, 400, 100, 30);

b2.setBounds(400, 400, 100, 30);

}

public void windowClosing(WindowEvent e) {

    f.dispose();

}

```

```

public void actionPerformed(ActionEvent e) {

    if(e.getSource()==b1) {

        if(t1.getText().isEmpty() || t2.getText().isEmpty() || t3.getText().isEmpty() ||
t4.getText().isEmpty() || t5.getText().isEmpty() || t6.getText().isEmpty() || t7.getText().isEmpty() ||
c1.getSelectedIndex()==-1 || c2.getSelectedIndex()==-1) {

            JOptionPane.showMessageDialog(f, "Invalid Input \nOne or more
input fields empty!");

        }

        else {

            int a = Integer.parseInt(t4.getText());

            int b = Integer.parseInt(t5.getText());

            int c = Integer.parseInt(t6.getText());

            int d = Integer.parseInt(t7.getText());

            int percentage = ((a+b+c+d) * 100)/400;

            f.dispose();

            JOptionPane.showMessageDialog(f, "Name: "+t1.getText()+"\nRoll
No.: "+t2.getText()+"\nSeatNo.: "+t3.getText()+"\nDivision: "+c1.getSelectedItem()+"\nDepartment: "+c
2.getSelectedItem()+"\nResult: "+percentage+"%");

        }

    }

    else {

        t1.setText("");

        t2.setText("");

        t3.setText("");

        t4.setText("");

        t5.setText("");

        t6.setText("");

        t7.setText("");

        c1.setSelectedIndex(-1);

        c2.setSelectedIndex(-1);

    }

}

}

```

```
public class DemoThree {  
    public static void main(String args[])  
    {  
        new StudentExam();  
    }  
}
```