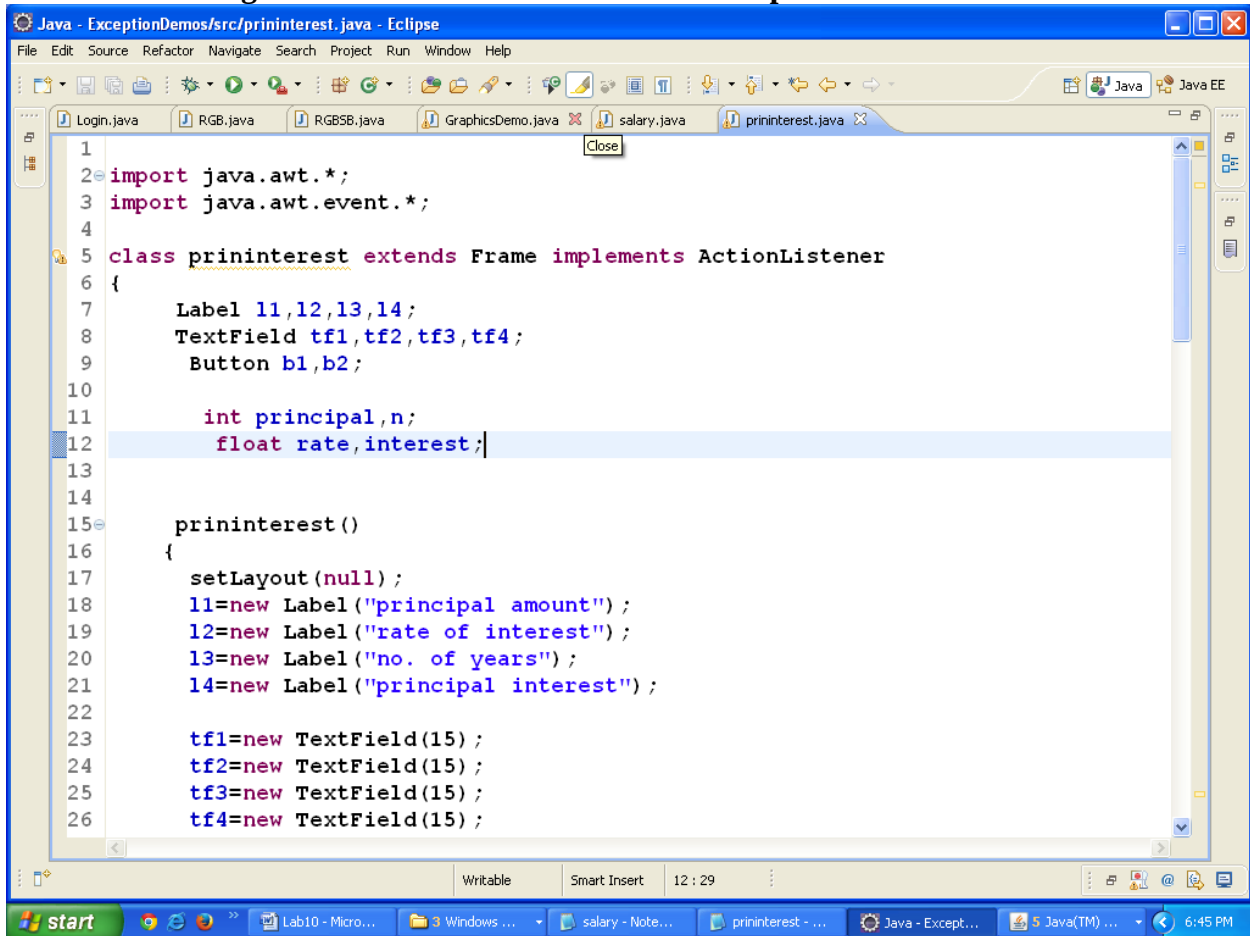


Lab-10 Assignments

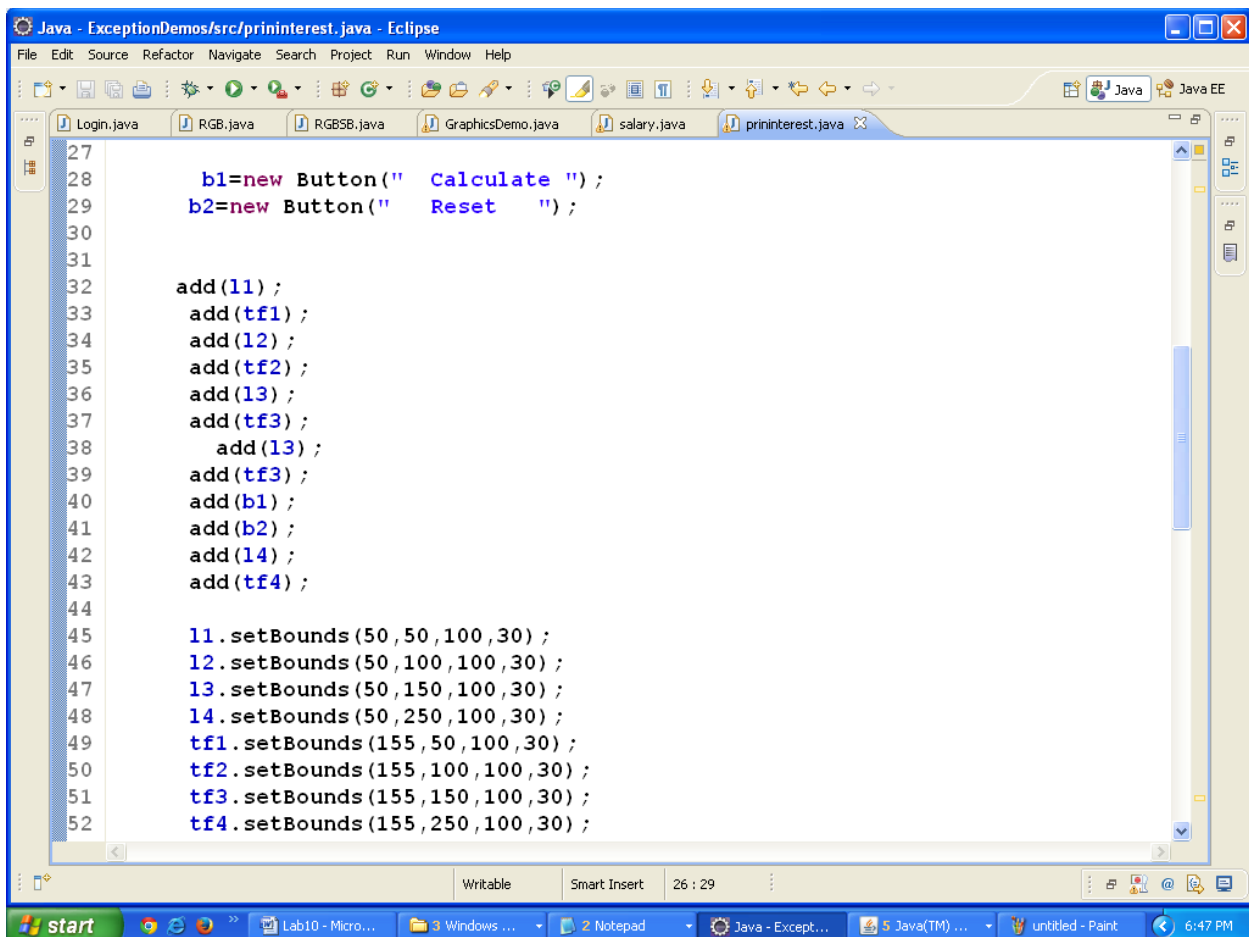
Event Handling

Demo 1: Handling an Event for Button to calculate SimpleInterest



```
1
2 import java.awt.*;
3 import java.awt.event.*;
4
5 class printerest extends Frame implements ActionListener
6 {
7     Label l1,l2,l3,l4;
8     TextField tf1,tf2,tf3,tf4;
9     Button b1,b2;
10
11     int principal,n;
12     float rate,interest;
13
14
15     printerest()
16     {
17         setLayout(null);
18         l1=new Label("principal amount");
19         l2=new Label("rate of interest");
20         l3=new Label("no. of years");
21         l4=new Label("principal interest");
22
23         tf1=new TextField(15);
24         tf2=new TextField(15);
25         tf3=new TextField(15);
26         tf4=new TextField(15);
```

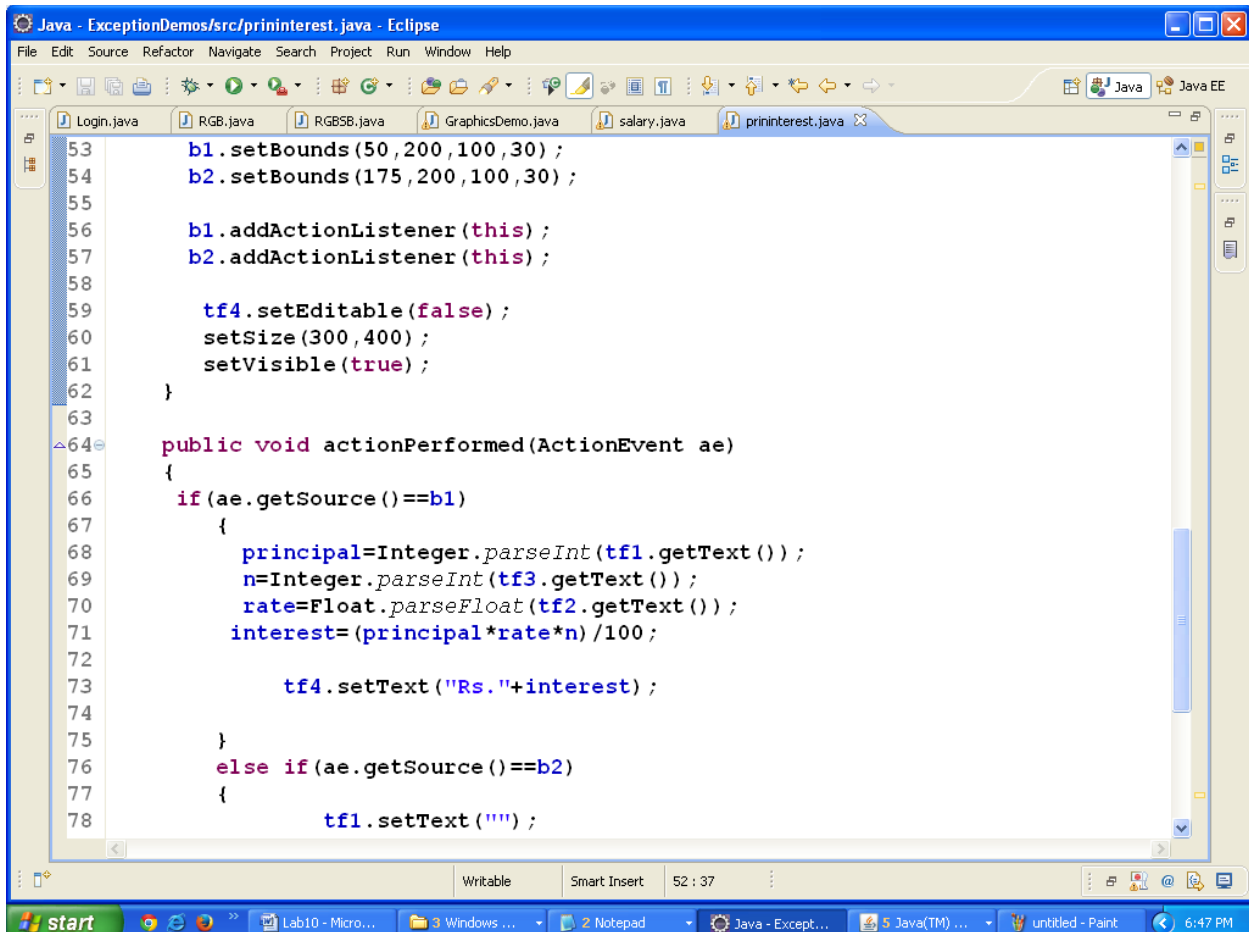
Continued...



The screenshot shows the Eclipse IDE with the file `printerest.java` open. The code defines two buttons, `b1` (Calculate) and `b2` (Reset), and adds several text fields (`tf1` through `tf4`) to a window. It also sets the initial bounds for these components.

```
27
28     b1=new Button(" Calculate ");
29     b2=new Button(" Reset ");
30
31
32     add(l1);
33     add(tf1);
34     add(l2);
35     add(tf2);
36     add(l3);
37     add(tf3);
38     add(l3);
39     add(tf3);
40     add(b1);
41     add(b2);
42     add(l4);
43     add(tf4);
44
45     l1.setBounds(50,50,100,30);
46     l2.setBounds(50,100,100,30);
47     l3.setBounds(50,150,100,30);
48     l4.setBounds(50,250,100,30);
49     tf1.setBounds(155,50,100,30);
50     tf2.setBounds(155,100,100,30);
51     tf3.setBounds(155,150,100,30);
52     tf4.setBounds(155,250,100,30);
```

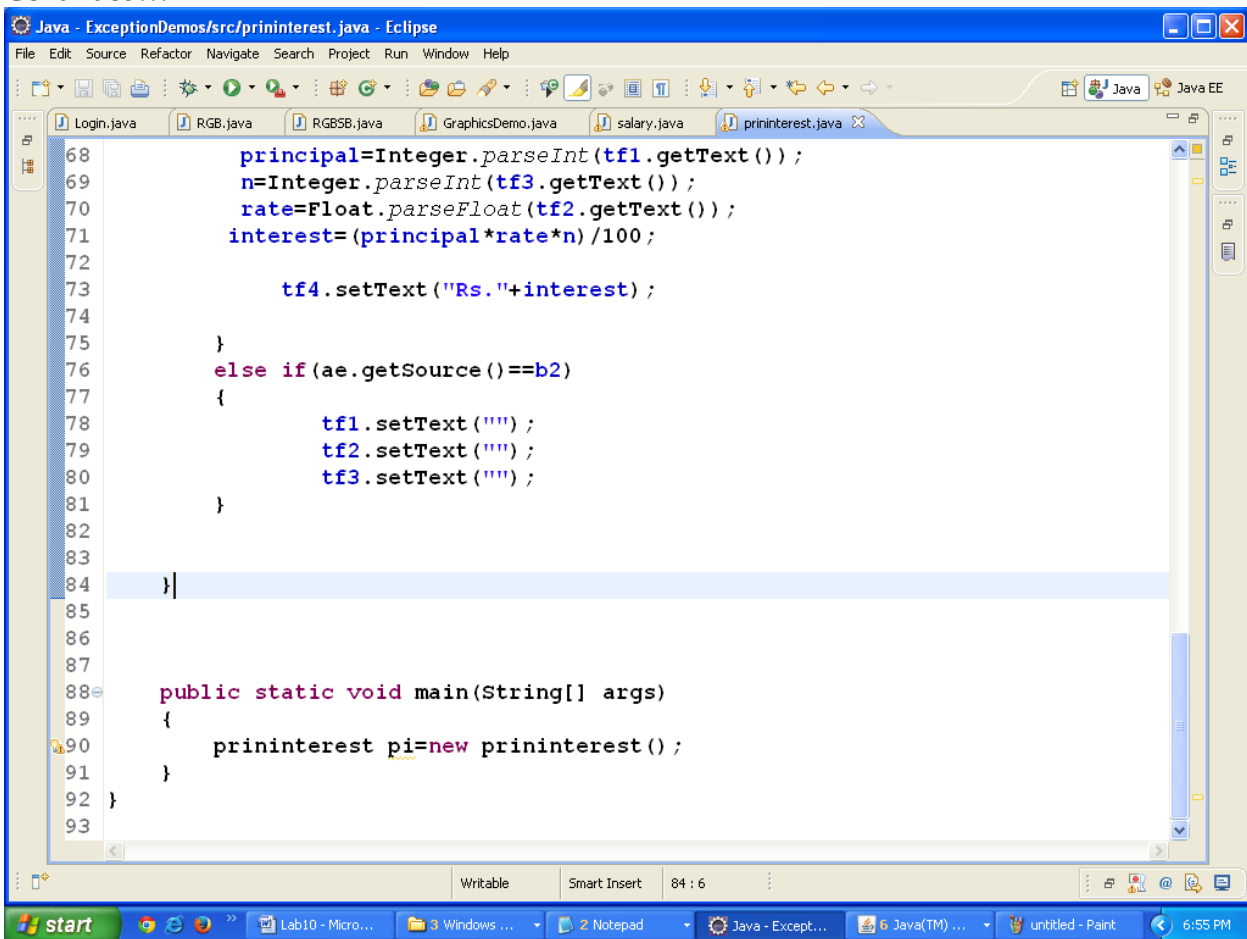
Continued...



The screenshot shows the continuation of the `printerest.java` file. It includes the `addActionListener` calls for `b1` and `b2`, the configuration of `tf4`, and the `actionPerformed` method which calculates the interest based on the input values.

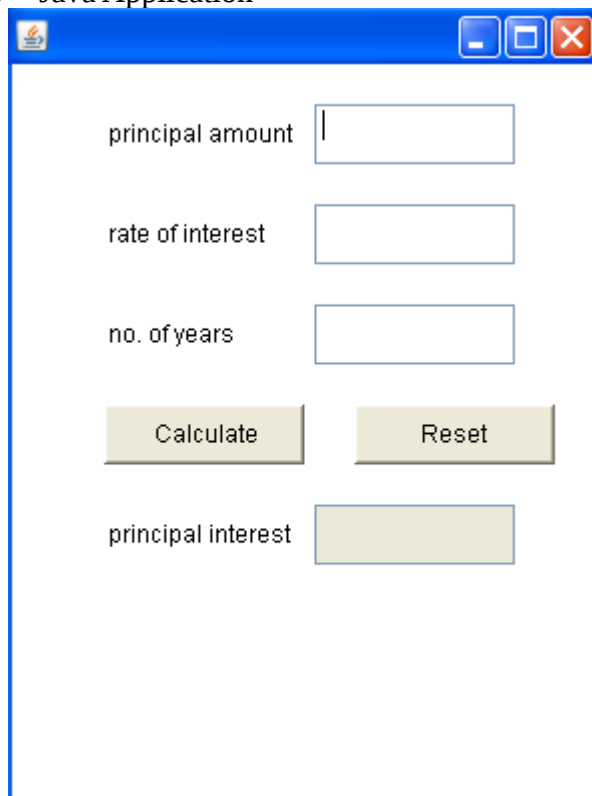
```
53     b1.setBounds(50,200,100,30);
54     b2.setBounds(175,200,100,30);
55
56     b1.addActionListener(this);
57     b2.addActionListener(this);
58
59     tf4.setEditable(false);
60     setSize(300,400);
61     setVisible(true);
62 }
63
64 public void actionPerformed(ActionEvent ae)
65 {
66     if(ae.getSource()==b1)
67     {
68         principal=Integer.parseInt(tf1.getText());
69         n=Integer.parseInt(tf3.getText());
70         rate=Float.parseFloat(tf2.getText());
71         interest=(principal*rate*n)/100;
72
73         tf4.setText("Rs."+interest);
74
75     }
76     else if(ae.getSource()==b2)
77     {
78         tf1.setText("");
```

Continued...



```
68     principal=Integer.parseInt(tf1.getText());
69     n=Integer.parseInt(tf3.getText());
70     rate=Float.parseFloat(tf2.getText());
71     interest=(principal*rate*n)/100;
72
73     tf4.setText("Rs."+interest);
74
75 }
76 else if (ae.getSource()==b2)
77 {
78     tf1.setText("");
79     tf2.setText("");
80     tf3.setText("");
81 }
82
83
84 }
85
86
87
88 public static void main(String[] args)
89 {
90     prininterest pi=new prininterest();
91 }
92 }
93
```

Run as-> Java Application



principal amount

rate of interest

no. of years

principal interest

Enter the values and click on Calculate Button(Event Handling)

principal amount 5000

rate of interest 9.5

no. of years 5

Calculate Reset

principal interest Rs.2375.0

Assignments To Solve

1. Validate Username and Password for LoginPage created in the previous lab
Print Access Granted on the Frame for valid data
Print Access Denied on the Frame for Invalid data
Handle this event for the click of **OK** Button
Close the Frame at the click of **Cancel** Button
2. Write an event handling code to print your name on the frame at the click of Mouse Button.
(hint : Mouse Event)
3. Handle an event for the Scrollbars created in the previous lab.
Set the background color of the frame with the Scroll values of the 3 Scrollbars.
4. Handle an event for the TextFields shown below . Show the Focus gained for the TextField when TextField is selected using Tab..(HINT: Use FocusListener)

