

Write a program to implement Bio-Data in AWT use all the controls

```
→import java .awt.*;
import java .applet.*;
import java .awt.event.*;
/*<applet code ="Biodata1" width=300 height=500>
</applet>*/
public class Biodata1 extends Applet
{
String msg="";
public void init()
{
Label l1=new Label("Name:-");
add(l1);
TextField tf1=new TextField();
add(tf1);
Label l2=new Label("Address:-");
add(l2);
TextArea ta1=new TextArea();
add(ta1);
Label l13=new Label("Fathers Name:-");
add(l13);
TextField tf5=new TextField();
add(tf5);
Label l14=new Label("Occupation of father:-");
add(l14);
TextField tf6=new TextField();
add(tf6);
Label l15=new Label("Mothers Name:-");
add(l15);
TextField tf7=new TextField();
add(tf7);
Label l18=new Label("Height:-");
add(l18);
TextField tf9=new TextField();
add(tf9);
Label l19=new Label("Complexion:-");
add(l19);
TextField tf10=new TextField();
add(tf10);
Label l20=new Label("Hair Colour:-");
add(l20);
TextField tf11=new TextField();
add(tf11);
Label l21=new Label("Weight:-");
add(l21);
```

```
TextField tf12=new TextField();
add(tf12);

Label l3=new Label("Contact Number:-");
add(l3);
TextField tf2=new TextField();
add(tf2);
Label l4=new Label("Email ID:-");
add(l4);
TextField tf3=new TextField();
add(tf3);
Label l5=new Label("Date of Birth:-");
add(l5);
TextField tf4=new TextField();
add(tf4);
Label l6=new Label("Marital Status:-");
add(l6);
Choice c1=new Choice();
c1.add("Married");
c1.add("UnMarried");
add(c1);
Label l7=new Label("Gender:-");
add(l7);
CheckboxGroup cbg=new CheckboxGroup();
Checkbox M=new Checkbox("Male",cbg,false);
add(M);
Checkbox F=new Checkbox("Female",cbg,false);
add(F);
Label l8=new Label("Nationality:-");
add(l8);
Choice c2=new Choice();
c2.add("Indian");
c2.add("Foreigner");
add(c2);
Label l9=new Label("Languages Known:-");
add(l9);
Checkbox H=new Checkbox("Hindi");
add(H);
Checkbox M1=new Checkbox("Marathi");
add(M1);
Checkbox E=new Checkbox("English");
add(E);
Checkbox O=new Checkbox("Other Languages");
add(O);
Choice c6=new Choice();
c6.add("French");
c6.add("Spanish");
c6.add("Chinese");
```

```
c6.add("Japanese");
add(c6);
Label l10=new Label("Qualification:-");
add(l10);
Choice c3=new Choice();
c3.add("SSC");
c3.add("HSC");
c3.add("Graduate");
c3.add("Post Graduate");
add(c3);
Label l11=new Label("Religion");
add(l11);
Choice c4=new Choice();
c4.add("Hindu");
c4.add("Muslim");
c4.add("Cristianity");
add(c4);
Label l12=new Label("Caste:-");
add(l12);
Choice c5=new Choice();
c5.add("Open");
c5.add("SC");
c5.add("ST");
c5.add("OBC");
add(c5);
Label l16=new Label("Extra qualification:-");
add(l16);
TextArea ta2=new TextArea();
add(ta2);
Label l17=new Label("Hobbies:-");
add(l17);
TextField tf8=new TextField();
add(tf8);

Button b1=new Button("SUBMIT");
Button b2=new Button("RESET");
Button b3=new Button("EXIT");
add(b1);
add(b2);
add(b3);
}
}
```

Write a program to implement Border Layout

```
→ import java.applet.*;
import java.awt.*;
/*<applet code="BorderLayoutSample" height=500 width=500>
</applet>*/
public class BorderLayoutSample extends Applet
{
    Button north,south,east,west,n,s,e,w;
    public void init()
    {
        n=new Button("North");
        s=new Button("South");
        e=new Button("East");
        w=new Button("West");
    }
    public void start()
    {
        BorderLayout bl=new BorderLayout();
        this.setLayout(bl);
        this.add(n,BorderLayout.NORTH);
        this.add(s,BorderLayout.SOUTH);
        this.add(e,BorderLayout.EAST);
        this.add(w,BorderLayout.WEST);
    }
}
```

Write a program to implement Flow Layout

```
→ import java.applet.*;
import java.awt.*;
/*<applet code="FlowLayoutSample" height=500 width=500>
</applet>*/
public class FlowLayoutSample extends Applet
{
    Button north,south,east,west;
    public void init()
    {
        north=new Button("North");
        south=new Button("South");
        east=new Button("East");
        west=new Button("West");
    }
    public void start()
    {
        FlowLayout f1=new FlowLayout(FlowLayout.RIGHT);
        this.add(north);
    }
}
```

```

this.add(south);
this.add(east);
this.add(west);
}
}

```

Write a program to implement Grid Layout

```

→ import java.applet.*;
import java.awt.*;
/*<applet code="GridLayoutSample" height=500 width=500>
</applet>*/
public class GridLayoutSample extends Applet
{
    public void start()
    {
        int i=10;
        int buttoncounter=0;
        this.setLayout(new GridLayout(i,i));
        for(int rowcount=0; rowcount<i; rowcount++)
        {
            for(int colcount=0; colcount<i; colcount++)
            {
                buttoncounter++;
                this.add(new Button(buttoncounter+" "));
            }
        }
    }
}

```

Write a program to implement Card Layout

```

→ import java.awt.*;
import java.applet.*;
import java.awt.event.*;
/*<applet code=CardLayoutSample height=500 width=400></applet>*/
public class CardLayoutSample extends Applet implements ActionListener
{
    Panel main,north,south;
    Button b1,b2;
    CardLayout cl=new CardLayout();
    public void init()
    {
        this.setLayout(new BorderLayout());
        b1=new Button("jpr");
        b2=new Button("ajp");
    }
}

```

```

public void start()
{
main=new Panel();
main.setLayout(cl);
north=new Panel();
north.setBackground(Color.red);
south=new Panel();
south.setBackground(Color.yellow);
main.add(north,"jpr");
main.add(south,"ajp");
b1.addActionListener(this);
b2.addActionListener(this);
this.add(b1, BorderLayout.NORTH);
this.add(b2, BorderLayout.SOUTH);
this.add(main);
}
public void actionPerformed(ActionEvent ae)
{
if(ae.getActionCommand().equals("jpr"))
{
cl.show(main,"jpr");
}
if(ae.getActionCommand().equals("ajp"))
{
cl.show(main,"ajp");
}
}
}

```

Write a program to implement Gridbag Layout



Program of Experiment no 3

Program 1:

```

→ import java.awt.*;
class MyFrame extends Frame
{
MyFrame()
{
setVisible(true);
setSize(500,500);
setTitle("Frame");
}
public static void main(String args[])
{

```

```
MyFrame f=new MyFrame();  
}  
}
```

Program 2:

```
→ import java.awt.*;  
public class MenuDemo extends Frame  
{  
    public static void main(String args[])  
    {  
        MenuDemo m=new MenuDemo();  
        m.setVisible(true);  
        m.setSize(700,700);  
        MenuBar mb=new MenuBar();  
        m.setMenuBar(mb);  
  
        //Creating Menu  
        Menu FileMenu=new Menu("File");  
        Menu EditMenu=new Menu("Edit");  
        Menu ViewMenu=new Menu("View");  
  
        //Adding Menus to MenuBar  
        mb.add(FileMenu);  
        mb.add(EditMenu);  
        mb.add(ViewMenu);  
  
        //Creating MenuItem for FileMenu  
        MenuItem new1=new MenuItem("New");  
        MenuItem open1=new MenuItem("Open");  
        //Adding Items to FileMenu  
        FileMenu.add(new1);  
        FileMenu.add(open1);  
  
        //Creating MenuItems for EditMenu  
        MenuItem cut1=new MenuItem("Cut");  
        MenuItem copy1=new MenuItem("Copy");  
        //Adding Items for EditMenu  
        EditMenu.add(cut1);  
        EditMenu.add(copy1);  
    }  
}
```

PROGRAM NO 3:

```
→ import java.awt.*;
public class Ref extends Frame
{
public static void main(String args[])
{
Ref m=new Ref();
m.setVisible(true);
m.setSize(800,800);
MenuBar mb=new MenuBar();
m.setMenuBar(mb);

//Creating Menu
Menu p1= new Menu("PageLayout");
Menu r1= new Menu("References");
Menu e1= new Menu("Mailing");

//Adding Menu to MenuBar
mb.add(p1);
mb.add(r1);
mb.add(e1);

//Disable the Mailing Menu
e1.setEnabled(false);
}
}
```

PROGRAM NO 4:

```
→ import java.awt.*;
public class Checkable extends Frame
{
public static void main(String agrs[])
{
Checkable m=new Checkable();
m.setVisible(true);
m.setSize(700,700);
MenuBar mb=new MenuBar();
m.setMenuBar(mb);
Menu I1=new Menu("Insert");
Menu H1=new Menu("Home");
mb.add(I1);
mb.add(H1);

//Creating MenuItem
CheckboxMenuItem p=new CheckboxMenuItem("Picture");
```



```
MenuItem pa=new MenuItem("Paste");
H1.add(p);
H1.add(pa);
}
}
```

Write a program to implement Bio-Data using swing
→

Write a program to implement JTABBED PANE
PROGRAM NO 1:

→ import java.awt.*;
import javax.swing.*;
import java.applet.*;
/*
<applet code="TabbedPane.class" width=400 height=400>
</applet>
*/
public class TabbedPane extends JApplet
{
public void init()
{
Container cp=getContentPane();
JTabbedPane jtp=new JTabbedPane();
jtp.addTab("Buttons",new ButtonPanel());
jtp.addTab("Data",new DataPanel());
cp.add(jtp);
}
}
class ButtonPanel extends JPanel
{
public ButtonPanel()
{
JButton b1=new JButton("Computer");
add(b1);
JButton b2=new JButton("IT");
add(b2);
JButton b3=new JButton("Mechanical");
add(b3);
JButton b4=new JButton("Civil");
add(b4);
}
}

```

class DataPanel extends JPanel
{
public DataPanel()
{
String Col[]={ "Branch","Rating" };
Object Data[][]={ { "IT","1" },
{ "COMPUTER","2" },
{ "MECHANICAL","3" },
{ "CIVIL","4" },
{ "ELECTRICAL","5" } };
JTable t=new JTable(Data,Col);
int v=ScrollPaneConstants.VERTICAL_SCROLLBAR_AS_NEEDED;
int h=ScrollPaneConstants.HORIZONTAL_SCROLLBAR_AS_NEEDED;
add(t);
}
}

```

PROGRAM NO 2:

```

➔import javax.swing.*;
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
/*<applet code="TabbedPane23.class" width=400 height=400>
</applet>
*/
public class TabbedPane23 extends JApplet
{
public void init()
{
Container cp=getContentPane();
JTabbedPane jtp=new JTabbedPane();
jtp.addTab("cities",new ButtonPanel());
jtp.addTab("Flavors",new FlavorPanel());
cp.add(jtp);
}
}
class ButtonPanel extends JPanel
{
}
class ColorPanel extends JPanel
{
}
class FlavorPanel extends JPanel

```

```

{
public FlavorPanel()
{
JComboBox cb=new JComboBox();
cb.addItem("Vanila");
cb.addItem("Chocolate");
cb.addItem("Strawberry");
add(cb);
}
}

```

Write a program to implement JCOMBOBOX

```

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

/*
<applet code="combodemo11" width=300 height=100>
</applet>
*/

public class combodemo11 extends JApplet
{
    public void init()
    {
        Container co = getContentPane();
        co.setLayout(new FlowLayout());

        JComboBox jc=new JComboBox();
        jc.addItem("cricket");
        jc.addItem("football");
        jc.addItem("hockey");
        jc.addItem("tennis");
        co.add(jc);
    }
}

```

Write a program to implement JSCROLLPANE

```
➔ import java.awt.*;
import java.applet.*;
import javax.swing.*;
/*<applet code="ScrollPane" width=300 height=400></applet>*/
public class ScrollPane extends JApplet
{
    Container cp= getContentPane();
    int b=1;
    public void init()
    {
        cp.setLayout(new BorderLayout());
        JPanel jp=new JPanel();
        jp.setLayout(new GridLayout(7,5));
        for(int i=1;i<=7;i++)
        {
            for(int j=1;j<=5;j++)
            {
                jp.add(new JButton("Button"+b));
                ++b;
            }
        }
        int v=ScrollPaneConstants.VERTICAL_SCROLLBAR_AS_NEEDED;
        int h=ScrollPaneConstants.HORIZONTAL_SCROLLBAR_AS_NEEDED;
        JScrollPane jsp=new JScrollPane(jp,v,h);
        cp.add(jsp,BorderLayout.CENTER);
    }
}
```

Write a program to implement JFRAME

```
➔ import java.awt.*;
import java.applet.*;
import javax.swing.*;
public class FrameExample extends JFrame
{
    FrameExample()
    {
        setSize(300,350);
        setVisible(true);
    }
    public static void main(String args[])
    {
        FrameExample f=new FrameExample();
    }
}
```

```
}  
}
```

Write a program to implement JTREE

```
→ import java.awt.*;  
  
import javax.swing.*;  
import javax.swing.tree.*;  
  
public class Tree extends JFrame  
{  
    public static void main(String args[])  
    {  
        JFrame j=new JFrame("Creating Tree");  
        Container c=j.getContentPane();  
        DefaultMutableTreeNode r1=new DefaultMutableTreeNode("Root",true);  
        DefaultMutableTreeNode r2=new DefaultMutableTreeNode("Vegetable",true);  
        DefaultMutableTreeNode r3=new DefaultMutableTreeNode("Capsicum");  
        DefaultMutableTreeNode r4=new DefaultMutableTreeNode("Carrot");  
        DefaultMutableTreeNode r5=new DefaultMutableTreeNode("Tomato");  
        DefaultMutableTreeNode r6=new DefaultMutableTreeNode("Potato");  
        DefaultMutableTreeNode r7=new DefaultMutableTreeNode("Fruits",true);  
        DefaultMutableTreeNode r8=new DefaultMutableTreeNode("Banana");  
        DefaultMutableTreeNode r9=new DefaultMutableTreeNode("Mango");  
        r1.add(r2);  
        r2.add(r3);  
        r2.add(r4);  
        r2.add(r5);  
        r2.add(r6);  
        r1.add(r7);  
        r7.add(r8);  
        r7.add(r9);  
        JTree t=new JTree(r1);  
        c.add(t);  
        j.setSize(500,500);  
        j.setVisible(true);  
    }  
}
```

Write a program to apply Random colour to bg of an applet

```
→ import java.awt.*;    //only compile
import java.util.*;
import javax.swing.*;
/*
<applet code="RandomColorApplet" width=500 height=500>
*/
public class RandomColorApplet extends JApplet
{
    JPanel p;
    public void init()
    {
        p=new JPanel();
        p.setBackground(Color.red);
        this.add(p);
    }
    public Color getRandomColor()
    {
        Random ra=new Random();
        int r=255-ra.nextInt(255);
        int g=255-ra.nextInt(255);
        int b=255-ra.nextInt(255);
        return new Color(r,g,b);
    }
    public void paint(Graphics g)
    {
        p.setBackground(getRandomColor());
    }
}
```

Write a program to create three Button and apply images on it

```
→ import java.awt.*;
import java.awt.event.*;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JTextField;
public class JButtonWithImage extends JFrame implements ActionListener
{
    JButton b1,b2,b3;
    ImageIcon i1,i2,i3;
    JTextField tf1;
    Container c;
    public void init()
    {
```

```

c=this.getContentPane();
c.setLayout(new GridLayout(4,1));
i1=new ImageIcon("D:\\\\Hello\\cake.jpg");
i2=new ImageIcon("D:\\\\Hello\\teddy.jpg");
i3=new ImageIcon("D:\\\\Hello\\Star.jpg");
b1=new JButton(i1);
b1.setName("Cake");
b1.setSize(70,70);
b1.addActionListener(this);
b2=new JButton(i2);
b2.setName("Teddy");
b2.setSize(70,30);
b2.addActionListener(this);
b3=new JButton(i3);
b3.setName("Star");
b3.setSize(20,30);
b3.addActionListener(this);
c.add(b1);
c.add(b2);
c.add(b3);
tf1=new JTextField();
c.add(tf1);
this.setSize(200,200);
this.setVisible(true);
}
public static void main(String args[])
{
JButtonWithImage ji=new JButtonWithImage();
ji.init();
}
public void actionPerformed(ActionEvent ae)
{
Object obj=ae.getSource();
if(obj instanceof JButton)
{
tf1.setText("you clicked on"+((JButton)obj).getName());
}
}
}

```

Write a program to implement JTABLE

PROGRAM NO 1:

```

→ import javax.swing.*;
import java.awt.*;
class CellBackground
{

```

```

public static void main(String args[])
{
JFrame jf=new JFrame("Cell Color");
Container c=jf.getContentPane();
String col[]={"Name", "Personality"};
String
data[][]={{ "Mohsin","Caring"}, {"Fayez","responsible"}, {"Avesh","Lazy"}, {"Faizan","Daring"}, {"T
alha","Punctual"}, {"Nabil","Peaceful"} };
JTable jt=new JTable(data,col);
jt.setBackground(Color.RED);
JScrollPane st=new JScrollPane(jt);
c.add(st);
jf.setSize(500,100);
jf.setVisible(true);
}
}

```

PROGRAM NO 2:

```

➔ import java.awt.BorderLayout;      //EXPORT TO EXCEL
import java.awt.Color;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import javax.swing.table.DefaultTableModel;
import javax.swing.table.JTableHeader;
import javax.swing.table.TableColumn;
import javax.swing.table.TableModel;
public class ExportFromJTableToExcel extends JFrame implements ActionListener
{
Container c;
JTable table;
TableColumn tcol;
JButton button1;
String col[]={"Name","Course","Year"};
String data[][]={{ "Mohsin","Java","3"}, {"Fayez","Code using Ajax","3"}, {"Avesh","C
programming","6"}, {"Talha","History","1"}, {"Nabil","Science","8"}, {"Faizan","Mechatronics","9"}
};
public void init()
{

c = this.getContentPane();

```



```

c.setLayout(new BorderLayout());
button1=new JButton("Export to Excel");
button1.addActionListener(this);
DefaultTableModel model=new DefaultTableModel(data,col);
table=new JTable(model);
JTableHeader header=table.getTableHeader();
header.setBackground(Color.yellow);
header.setVisible(true);
JScrollPane pane=new JScrollPane(table);
c.add(pane);
c.add(button1,BorderLayout.SOUTH);
this.setSize(400,400);
this.setVisible(true);
}
public void exportTableToFile(JTable table,File file)throws IOException
{
TableModel model=table.getModel();
FileWriter fileWriterObj=new FileWriter(file);
for(int i=0;i<model.getColumnCount();i++)
{
fileWriterObj.write(model.getColumnName(i)+"\t");
}
fileWriterObj.write("\n");
for(int i=0;i<model.getRowCount();i++)
{
for(int j=0;j<model.getColumnCount();j++)
{
fileWriterObj.write(model.getValueAt(i,j).toString()+"\t");
}
fileWriterObj.write("\n");
}
fileWriterObj.write("\n");
fileWriterObj.close();
}
public static void main(String args[])
{
ExportFromJTableToExcel demo=new ExportFromJTableToExcel();
demo.init();
}
public void actionPerformed(ActionEvent ae)
{
System.out.println(ae.getActionCommand().toString());
if(ae.getActionCommand().equalsIgnoreCase("Export to Excel"))
{
System.out.println("Trying to export");
try
{
exportTableToFile(table,new File("D:\\java\\ExportedData.xls"));

```

```

System.out.println("Exported Successfully");
System.exit(0);
}
catch(IOException e)
{
System.out.println("Unable to export the data in excel kindly check the file path");
e.printStackTrace();
}
}
}
}
}

```

Write a program to create three Radio Button and when user click on the button bg-colour changes as Red,Green,Blue

```

→ import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
public class Radio extends JFrame implements ItemListener
{
JRadioButton j1,j2,j3;
Container c;
Radio(String title)
{
super(title);
j1=new JRadioButton("RED",true);
j2=new JRadioButton("Green");
j3=new JRadioButton("blue");
ButtonGroup bg=new ButtonGroup();
bg.add(j1);
bg.add(j2);
bg.add(j3);
c=getContentPane();
c.setLayout(new FlowLayout());
c.setBackground(Color.red);
c.add(j1);
c.add(j2);
c.add(j3);
j1.addItemListener(this);
j2.addItemListener(this);
j3.addItemListener(this);
setSize(200,300);
setVisible(true);
}
public void itemStateChanged(ItemEvent ie)
{
if(ie.getSource()==j1)

```

```

{
c.setBackground(Color.red);
}
else if(ie.getSource()==j2)
{
c.setBackground(Color.green);
}
else if(ie.getSource()==j3)
{
c.setBackground(Color.blue);
}
}
public static void main(String args[])
{
Radio e=new Radio("Changing color");
}
}

```

Write a program to implement methods of MOUSEMOTION LISTENER(ADAPTER CLASS)

➔ import java.awt.*;

import java.awt.event.*;

import javax.swing.*;

public class JButtonWithMouseMotion extends JFrame implements MouseMotionListener

```

{
JButton b1,b2,b3;
ImageIcon i1,i2,i3;
JTextField tf1;
Container c;
public void init()
{
c=this.getContentPane();
c.setLayout(new GridLayout(4,1));
i1=new ImageIcon("D:\\\\Hello\\cake.JPG");
i2=new ImageIcon("D:\\\\Hello\\doll.JPG");
i3=new ImageIcon("D:\\\\Hello\\star.JPG");
b1=new JButton(i1);
b1.setName("Smiley");
b1.setSize(20,30);
b1.addMouseMotionListener(this);

```

```

b2=new JButton(i2);
b2.setSize(20,30);
b2.setName("ModernArt");
b2.addMouseMotionListener(this);
b3=new JButton(i3);
b3.setSize(20,30);
b3.setName("Google");
b3.addMouseMotionListener(this);
c.add(b1);
c.add(b2);
c.add(b3);
tf1=new JTextField();
c.add(tf1);
this.setSize(200,200);
this.setVisible(true);
}
public static void main(String args[])
{
JButtonWithMouseMotion ji=new JButtonWithMouseMotion();
ji.init();
}
public void mouseDragged(MouseEvent me)
{
Object obj=me.getSource();
if(obj instanceof JButton)
{
tf1.setText("You dragged mouse on"+((JButton)obj).getName());
}
}
public void mouseMoved(MouseEvent me)
{
Object obj=me.getSource();
if(obj instanceof JButton)
{
tf1.setText("You moved mouse on"+((JButton)obj).getName());
}
}
}

```

```
}
```

Write a program to create applet to accept 2 no's in two TEXTFIELD & display largest of 2 no's

```
→ import java.awt.Container;
import java.awt.*;
import java.awt.event.*;
import java.awt.event.ActionListener;
import java.awt.event.KeyEvent;
import java.awt.event.KeyListener;
import javax.swing.*;
import javax.swing.JFrame;
import javax.swing.JOptionPane;
import javax.swing.JTextField;
public class IdentifyLargestNumber extends JFrame implements ActionListener,KeyListener
{
    JButton button;
    JTextField tf1,tf2;
    String msg;
    public void init()
    {
        Container c=this.getContentPane();
        c.setLayout(new GridLayout(4,1));
        tf1=new JTextField();
        tf1.addKeyListener(this);
        tf2=new JTextField();
        tf2.addKeyListener(this);
        button=new JButton("Largest No");
        button.addActionListener(this);
        c.add(tf1);
        c.add(tf2);
        c.add(button);
        this.setSize(300,300);
        this.setVisible(true);
    }
}
```

```

public static void main(String args[])
{
    IdentifyLargestNumber in=new IdentifyLargestNumber();
    in.init();
}
public void displayLargestNo()
{
    int a1=Integer.parseInt(tf1.getText());
    int a2=Integer.parseInt(tf2.getText());
    if(a1>a2)
    {
        msg=a1+"is largest number";
    }
    else
    {
        msg=a2+"is largest number";
    }
    JOptionPane.showMessageDialog(this,msg);
}
public void actionPerformed(ActionEvent e)
{
    if(e.getActionCommand().equalsIgnoreCase("Largest No"))
    {
        displayLargestNo();
    }
}
public void keyPressed(KeyEvent ke)
{
}
public void keyReleased(KeyEvent ke)
{
}
public void keyTyped(KeyEvent ke)
{
    char vChar=ke.getKeyChar();
    if(!(Character.isDigit(vChar)||vChar==KeyEvent.VK_BACK_SPACE)||vChar==KeyEvent.VK_DELETE)))
    {

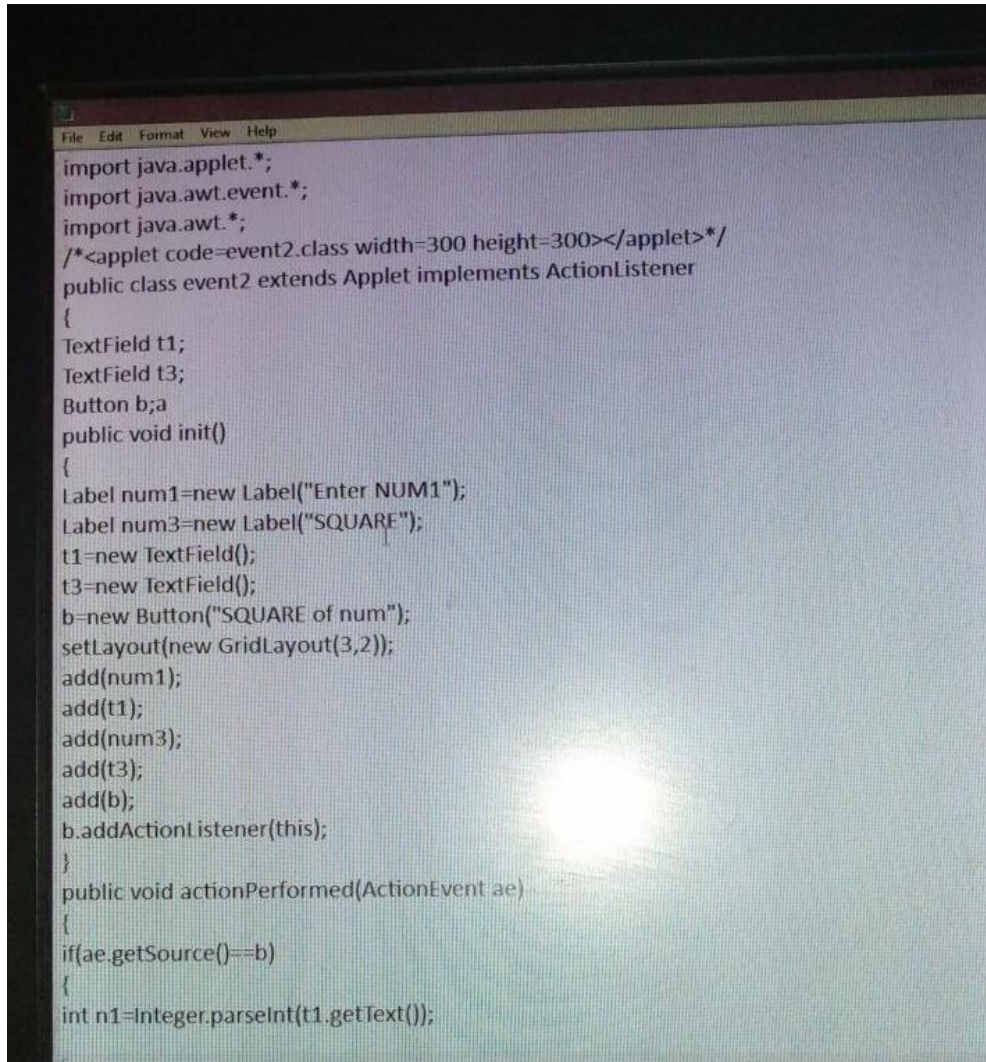
```

```
ke.consume();  
}  
}  
}
```

Write a program for ADDITION of 2 no's make use of TEXTFIELD & BUTTON

```
→ import java.awt.*;  
import java.applet.*;  
import java.awt.GridLayout;  
/*<applet code=GridLayoutTest height=500 width=400></applet>*/  
public class GridLayoutTest extends Applet  
{  
    Label l1,l2,l3;  
    Button b1;  
    TextField t1,t2,t3;  
    public void init()  
    {  
        l1=new Label("Enter number in TextField");  
        l2=new Label("Enter number in TextField");  
        l3=new Label("Adding two numbers");  
        b1=new Button("Add");  
        t1=new TextField();  
        t2=new TextField();  
        t3=new TextField(t1+t2);  
    }  
    public void start()  
    {  
        this.setLayout(new GridLayout(4,1));  
        add(l1);  
        add(t1);  
        add(l2);  
        add(t2);  
        add(l3);  
        add(t3);  
        add(b1);  
    }  
}
```

Write a program to create applet to accept no in TEXTFIELD & display the SQUARE of number a button with a caption square



```
import java.applet.*;
import java.awt.event.*;
import java.awt.*;
/*<applet code=event2.class width=300 height=300></applet>*/
public class event2 extends Applet implements ActionListener
{
    TextField t1;
    TextField t3;
    Button b;a
    public void init()
    {
        Label num1=new Label("Enter NUM1");
        Label num3=new Label("SQUARE");
        t1=new TextField();
        t3=new TextField();
        b=new Button("SQUARE of num");
        setLayout(new GridLayout(3,2));
        add(num1);
        add(t1);
        add(num3);
        add(t3);
        add(b);
        b.addActionListener(this);
    }
    public void actionPerformed(ActionEvent ae)
    {
        if(ae.getSource()==b)
        {
            int n1=Integer.parseInt(t1.getText());
```


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```
TextField t3;  
Button b;a  
public void init()  
{  
    Label num1=new Label("Enter NUM1");  
    Label num3=new Label("SQUARE");  
    t1=new TextField();  
    t3=new TextField();  
    b=new Button("SQUARE of num");  
    setLayout(new GridLayout(3,2));  
    add(num1);  
    add(t1);  
    add(num3);  
    add(t3);  
    add(b);  
    b.addActionListener(this);  
}  
public void actionPerformed(ActionEvent ae)  
{  
    if(ae.getSource()==b)  
    {  
        int n1=Integer.parseInt(t1.getText());  
        int square=n1*n1;  
        t3.setText(Integer.toString(square));  
    }  
}
```

Write a program to create applet to change the bg colour of applet according to scrolling & scrollbar RED, BLUE, GREEN

```
→ import java.awt.*; *****
import java.awt.event.*;
import java.applet.*;
/*<applet code="Scroll.class" height=500 width=500></applet>*/
public class Scroll extends Applet implements AdjustmentListener
{
Scrollbar s1,s2,s3;
GridLayout g;
public void init()
{
g=new GridLayout(4,2);
setLayout(g);
s1=new Scrollbar(Scrollbar.HORIZONTAL,0,50,0,255);
s2=new Scrollbar(Scrollbar.HORIZONTAL,0,80,0,255);
s3=new Scrollbar(Scrollbar.HORIZONTAL,0,100,0,255);
s1.addAdjustmentListener(this);
s2.addAdjustmentListener(this);
s3.addAdjustmentListener(this);
add(s1);
add(s2);
add(s3);
}
public void adjustmentValueChanged(AdjustmentEvent e)
{
repaint();
}
public void paint(Graphics g)
{
int x,y,z;
x=s1.getValue();
y=s2.getValue();
z=s3.getValue();
showStatus("Red: " +x +" Green: " +y +" Blue: " +z);
Color c=new Color(x,y,z);
setBackground(c);
}
}
```

Write a program to create & buttons YES & NO & EXIT using applet once user clicks on button yes – it while show the msg “YOU PRESSED YES” & viceversa

```
→ import java.applet.*; *****
```

```

import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

import javax.swing.JApplet;
import javax.swing.JButton;
import javax.swing.JOptionPane;
/*<applet code="YesNoAndExitProgram.class" height=500 width=500></applet> */
public class YesNoAndExitProgram extends JApplet implements ActionListener
{
    JButton yes_Button;
    JButton no_Button;
    JButton exit_Button;
    public void init()
    {
        this.setLayout(new GridLayout(3,1));
        yes_Button = new JButton("Yes");
        no_Button = new JButton("No");
        exit_Button = new JButton("Exit");
        this.add(yes_Button);
        this.add(no_Button);
        this.add(exit_Button);
        yes_Button.addActionListener(this);
        no_Button.addActionListener(this);
        exit_Button.addActionListener(this);
        this.setSize(200,200);
        this.setVisible(true);
    }
    public void actionPerformed(ActionEvent ae) {
        if(ae.getActionCommand().equalsIgnoreCase("Yes"))
        {
            JOptionPane.showMessageDialog(this, "You clicked on Yes");
        }
        else if (ae.getActionCommand().equalsIgnoreCase("No"))
        {
            JOptionPane.showMessageDialog(this, "You clicked on No");
        }
        else if(ae.getActionCommand().equalsIgnoreCase("Exit"))
        {
            JOptionPane.showMessageDialog(this, "You clicked on Exit");
        }
    }
}

```

Write a program to implement adapter class



