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);
CheckboxGroupcbg=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:

→ ***i***mport 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");
I1.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);
}
}
```

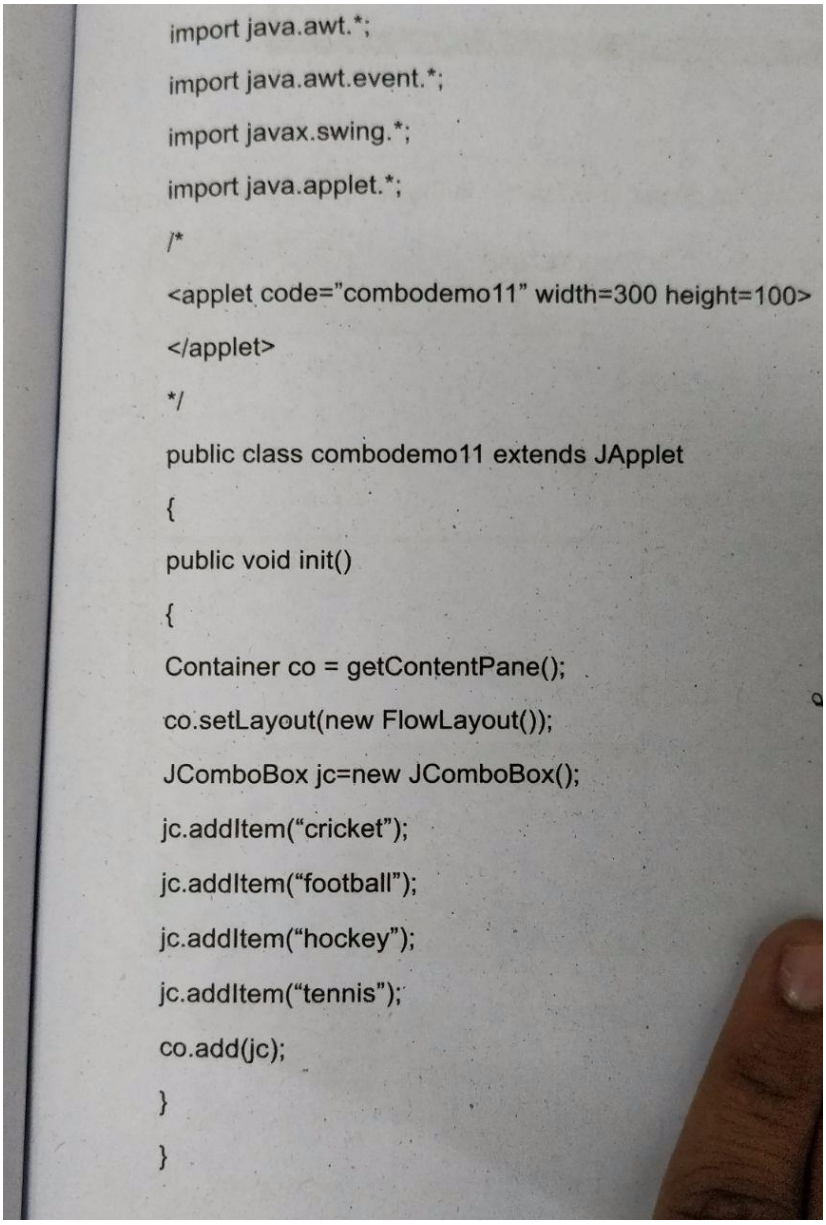
PROGRAM NO 2:

→

```
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 complie

```
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_DE
LETE)))
{
```

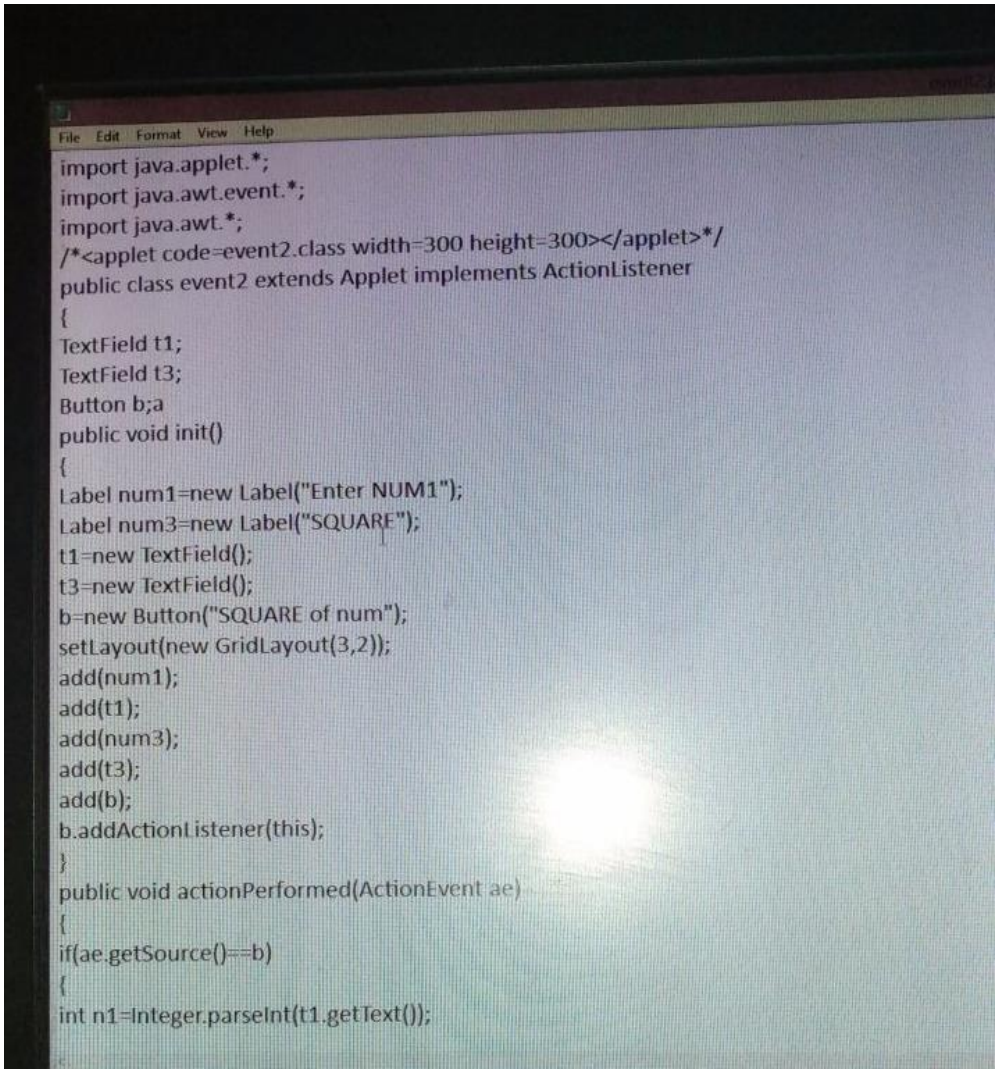
```
ke.consume();
}
}
}
```

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

→

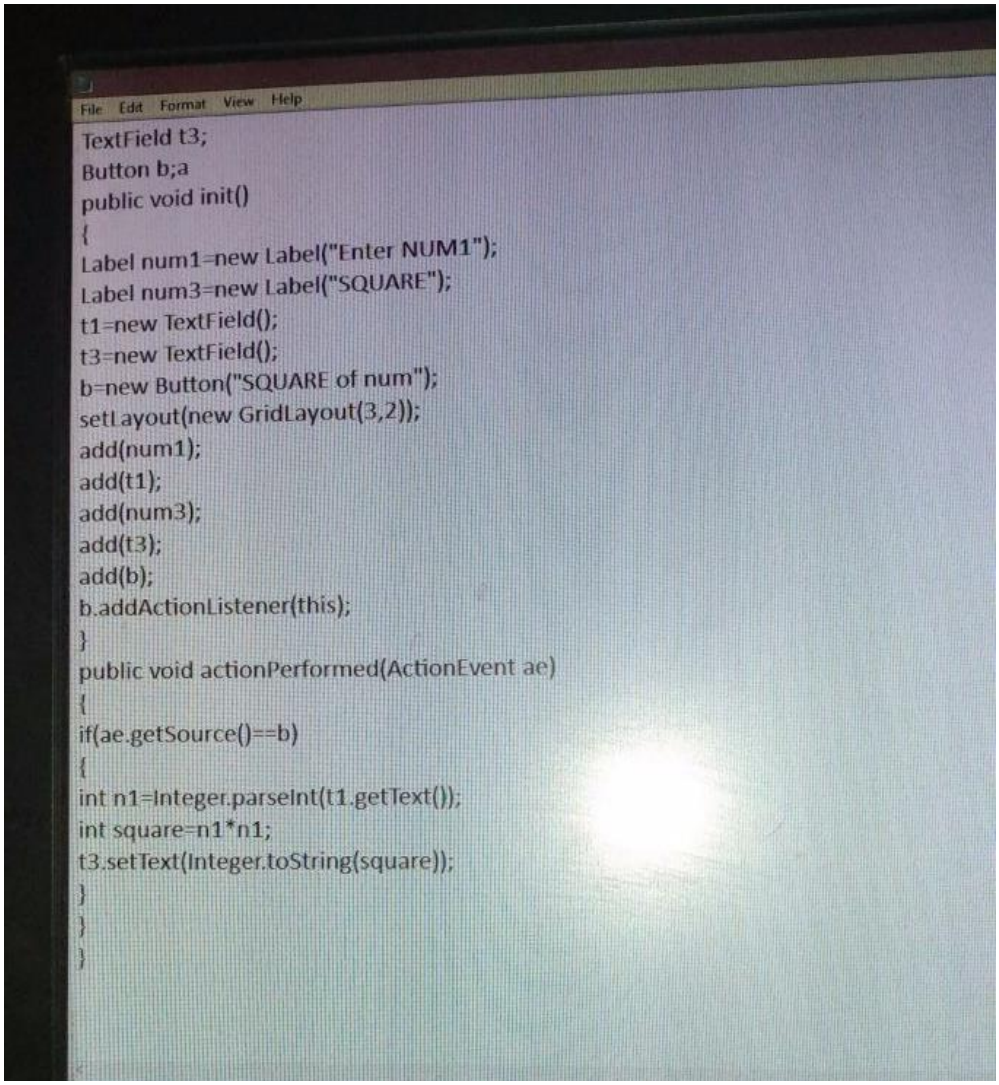
```
import java.awt.*;
import java.applet.*;
import java.awt.GridLayout;
/*<applet code=GridLayoutTest height=500 width=400></applet>*/
public class GridLayoutTest extends Applet
{
Label l1,l2,l3;
Button b1;
TextField t1,t2,t3;
public void init()
{
l1=new Label("Enter number in TextField");
l2=new Label("Enter 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



File Edit Format View Help

```
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());
```



File Edit Format View Help

```
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

→

```
import java.awt.Container;
import java.awt.GridLayout;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.awt.event.MouseMotionAdapter;
import javax.swing.ImageIcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JTextField;
public class AdapterClassDemo extends JFrame
{
public class MyMouseMotionAdapter extends MouseMotionAdapter
{
public void mouseMoved(MouseEvent me)
{
Object obj = me.getSource();
if(obj instanceof JButton)
{
tf1.setText("You moved mouse  on " + ((JButton)obj).getName());
}
}
}
public class MyMouseAdapter extends MouseAdapter
{
public void mouseClicked(MouseEvent me)
{
Object obj = me.getSource();
if(obj instanceof JButton)
{
tf1.setText("You clicked mouse  on " + ((JButton)obj).getName());
}
}
}
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("C:\\\\Users\\Aafreen\\Desktop.JPG");
i2 = new ImageIcon("C:\\\\Users\\Aafreen\\Desktop.JPG");
i3 = new ImageIcon("C:\\\\Users\\Aafreen\\Desktop.JPG");
b1 = new JButton(i1);
b1.setName("light house");
```

```
b1.setSize(20,30);
b1.addMouseMotionListener(new MyMouseMotionAdapter());
b1.addMouseListener(new MyMouseAdapter());
b2 = new JButton(i2);
b2.setSize(20,30);
b2.setName("peguin");
b2.addMouseMotionListener(new MyMouseMotionAdapter());
b2.addMouseListener(new MyMouseAdapter());
b3 = new JButton(i3);
b3.setSize(20,30);
b3.setName("tulips");
b3.addMouseMotionListener(new MyMouseMotionAdapter());
b3.addMouseListener(new MyMouseAdapter());
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[])
{
AdapterClassDemo ji = new AdapterClassDemo();
ji.init();
}
}
```