

```
package com.mycompany.laytypes;
```

```
import javax.swing.JButton;
```

```
import javax.swing.JFrame;
```

```
import java.awt.*;
```

```
import javax.swing.*;
```

```
import java.awt.event.*;
```

```
public class LAYTYPES //Main class
```

```
{
```

```
    public static void main(String[] args) //
```

```
Main method
```

```
{
```

```
    JFrame f=new JFrame("ALL TYPES OF  
LAYOUTS IN ONE FRAME");
```

```
    Panel p = new Panel();
```

```
Panel p2 = new Panel();
```

```
Panel p3 = new Panel();
```

```
Panel p4 = new Panel();
```

```
Panel p5 = new Panel();
```

```
CardLayout cardLayout = new  
CardLayout(20,20);
```

```
JPanel p6 = new JPanel(cardLayout);
```

```
//LAYOUT TITLES INSIDE RESPECTIVE  
LABELS
```

```
JLabel label1 = new JLabel("BORDER  
LAYOUT");
```

```
JLabel label2 = new JLabel("GRID  
LAYOUT");
```

```
JLabel label3 = new JLabel("FLOW  
LAYOUT");
```

```
JLabel label4 = new JLabel("GRID BAG
```

```
LAYOUT ");
```

```
    JLabel label5 = new JLabel("BOX  
LAYOUT");
```

```
    JLabel label6 = new JLabel("CARD  
LAYOUT");
```

```
label1.setBounds(100, 310, 200, 30);  
label2.setBounds(400, 310, 200, 30);  
label3.setBounds(700, 310, 200, 30);  
label4.setBounds(1000, 310, 200, 30);  
label5.setBounds(100, 710, 200, 30);  
label6.setBounds(400, 710, 200, 30);
```

```
//LAYOUT TYPES
```

```
p.setLayout(new BorderLayout(20,10));
```

```
p2.setLayout(new GridLayout(2,2));
```

```
p3.setLayout(new
```

```
FlowLayout(FlowLayout.CENTER));
```

```
p4.setLayout(new GridBagLayout());
```

```
p5.setLayout(new
```

```
BoxLayout(p5,BoxLayout.Y_AXIS));
```

```
//SETTING BOUNDS OF ALL PANELS
```

```
p.setBounds(0,0,300,300);
```

```
p2.setBounds(301,0,300,300);
```

```
p3.setBounds(602,0,300,300);
```

```
p4.setBounds(903,0,300,300);
```

```
p5.setBounds(0,400,300,300);
```

```
p6.setBounds(301,400,300,300);
```

```
//SETTING BUTTONS FOR p1
```

```
JButton b1= new JButton("LEFT");  
JButton b2 = new JButton("RIGHT");  
JButton b3 = new JButton("UP ");  
JButton b4 = new JButton("DOWN");  
JButton b5 = new JButton ("CENTER");
```

```
//SETTING BUTTONS FOR p2
```

```
JButton a1= new JButton("1");  
JButton a2 = new JButton("2");  
JButton a3 = new JButton("3 ");  
JButton a4 = new JButton("4");
```

```
//SETTING BUTTONS FOR p3
```

```
JButton c1= new JButton("1");  
JButton c2 = new JButton("2");  
JButton c3 = new JButton("3");  
JButton c4 = new JButton("4");  
JButton c5= new JButton("5");
```

```
JButton c6 = new JButton("6");  
JButton c7 = new JButton("7 ");  
JButton c8 = new JButton("8");
```

```
//SETTING BUTTONS FOR p6
```

```
JButton card1 = new JButton("Card 1");  
JButton card2 = new JButton("Card 2");  
JButton card3 = new JButton("Card 3");
```

```
//ADDING BUTTONS TO RESPECTIVE  
PANELS
```

```
p.add (b1, BorderLayout.WEST);  
p.add (b2, BorderLayout.EAST);  
p.add (b3, BorderLayout.NORTH);  
p.add (b4, BorderLayout.SOUTH);  
p.add (b5, BorderLayout.CENTER);
```

```
p2.add (a1);  
p2.add (a2);
```

```
p2.add (a3);
```

```
p2.add (a4);
```

```
p3.add (c1);
```

```
p3.add (c2);
```

```
p3.add (c3);
```

```
p3.add (c4);
```

```
p3.add (c5);
```

```
p3.add (c6);
```

```
p3.add (c7);
```

```
p3.add (c8);
```

```
GridBagConstraints c = new  
GridBagConstraints();
```

```
c.insets = new Insets(2,2,2,2);
```

```
c.gridx = 0;
```

```
c.gridy = 0;
```

```
c.ipadx = 100;
```

```
p4.add(new JButton("Merged"),c);
```

```
c.gridx = 1;  
c.ipadx = 8;  
p4.add(new JButton("B1"), c);
```

```
c.gridx = 2;  
c.ipadx = 8;  
p4.add(new JButton("B2"), c);
```

```
p5.add(new JButton("MATHS"));  
p5.add(new JButton("ENGLISH "));  
p5.add(new JButton("COMPUTER"));  
p5.add(new JButton("G.K."));  
p5.add(new JButton("VEDANTA"));  
p5.add(new JButton("HINDI"));  
p5.add(new JButton("DBMS"));  
p5.add(new JButton("E.V.S"));  
p5.add(new JButton("SCIENCE"));  
p5.add(new JButton("HRM"));  
p5.add(new JButton("SOCIOLOGY"));
```



```
p6.add(card1, "Card 1");  
p6.add(card2, "Card 2");  
p6.add(card3, "Card 3");
```

```
//for card layout
```

```
    ActionListener al = new  
ActionListener()  
    {  
        public void  
actionPerformed(ActionEvent e)  
        {  
            cardLayout.next(p6);  
        }  
    };  
    card1.addActionListener(al);  
    card2.addActionListener(al);  
    card3.addActionListener(al);
```

```
    // SETTING BG COLOURS OF  
    RESPECTIVE PANELS
```

```
p.setBackground(Color.orange);  
p3.setBackground(Color.pink);  
p4.setBackground(Color.green);  
p5.setBackground(Color.cyan);  
p6.setBackground(Color.yellow);
```

```
//ADDING PANELS IN THE FRAME
```

```
f.add(p);  
f.add(p2);  
f.add(p3);  
f.add(p4);  
f.add(p5);  
f.add(p6);
```

```
//ADDING LABELS IN THE FRAME
```

```
f.add(label1);  
f.add(label2);  
f.add(label3);  
f.add(label4);  
f.add(label5);
```

```
f.add(label6);
```

```
f.setSize(1050,1050); // setting frame  
size
```

```
f.setLayout(null);
```

```
f.pack(); //THIS IS OPTIONAL
```

```
f.setVisible(true); // setting visiblity
```

```
f.setDefaultCloseOperation(JFrame.EXIT_O  
N_CLOSE); // THIS IS OPTIONAL
```

```
//end of the program  
}}
```



