

Java JLabel Example

```
import javax.swing.*;
class LabelExample
{
    public static void main(String args[])
    {
        JFrame f= new JFrame("Label Example");
        JLabel l1,l2;
        l1=new JLabel("First Label.");
        l1.setBounds(50,50, 100,30);
        l2=new JLabel("Second Label.");
        l2.setBounds(50,100, 100,30);
        f.add(l1);
    f.add(l2);
        f.setSize(300,300);
        f.setLayout(null);
        f.setVisible(true);
    }
}
```

Java JLabel Example with ActionListener

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class LabelExample extends JFrame implements ActionListener
{
    JTextField tf; JLabel l; JButton b;
    LabelExample()
    {
        tf=new JTextField();
        tf.setBounds(50,50, 150,20);
        l=new JLabel();
        l.setBounds(50,100, 250,20);
        b=new JButton("Find IP");
        b.setBounds(50,150,95,30);
    }
}
```

```

        b.addActionListener(this);
        add(b);
add(tf);
add(l);
        setSize(400,400);
        setLayout(null);
        setVisible(true);
    }
    public void actionPerformed(ActionEvent e)
    {
        try
        {
            String host=tf.getText();
            String ip=java.net.InetAddress.getByName(host).getHostAddress();
            l.setText("IP of "+host+" is: "+ip);
        }
        catch(Exception ex)
        {
            System.out.println(ex);
        }
    }
    public static void main(String[] args)
    {
        new LabelExample();
    }
}

```

Example of displaying image on the button

```

import javax.swing.*;
public class ButtonExample
{
    ButtonExample()
    {
        JFrame f=new JFrame("Button Example");
        JButton b=new JButton(new ImageIcon("D:\\icon.png"));
        b.setBounds(100,100,100, 40);
        f.add(b);
        f.setSize(300,400);
    }
}

```

```

f.setLayout(null);
f.setVisible(true);
f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
}
public static void main(String[] args)
{
    new ButtonExample();
}
}

```

Java JTextField Example with ActionListener

```

import javax.swing.*;
import java.awt.event.*;
public class TextFieldExample implements ActionListener
{
    JTextField tf1,tf2,tf3;
    JButton b1,b2;
    TextFieldExample()
    {
        JFrame f= new JFrame();
        tf1=new JTextField();
        tf1.setBounds(50,50,150,20);
        tf2=new JTextField();
        tf2.setBounds(50,100,150,20);
        tf3=new JTextField();
        tf3.setBounds(50,150,150,20);
        tf3.setEditable(false);
        b1=new JButton("+");
        b1.setBounds(50,200,50,50);
        b2=new JButton("-");
        b2.setBounds(120,200,50,50);
        b1.addActionListener(this);
        b2.addActionListener(this);
        f.add(tf1);
    }
    f.add(tf2);
    f.add(tf3);
}

```

```

f.add(b1);
f.add(b2);
    f.setSize(300,300);
    f.setLayout(null);
    f.setVisible(true);
}
public void actionPerformed(ActionEvent e)
{
    String s1=tf1.getText();
    String s2=tf2.getText();
    int a=Integer.parseInt(s1);
    int b=Integer.parseInt(s2);
    int c=0;
    if(e.getSource()==b1)
    {
        c=a+b;
    }
    else if(e.getSource()==b2)
    {
        c=a-b;
    }
    String result=String.valueOf(c);
    tf3.setText(result);
}
public static void main(String[] args)
{
    new TextFieldExample();
}}

```

Java JTextArea Example with ActionListener

```

import javax.swing.*;
import java.awt.event.*;
public class TextAreaExample implements ActionListener
{
    JLabel l1,l2;
    JTextArea area;
    JButton b;

```

```

TextAreaExample()
{
    JFrame f= new JFrame();
    l1=new JLabel();
    l1.setBounds(50,25,100,30);
    l2=new JLabel();
    l2.setBounds(160,25,100,30);
    area=new JTextArea();
    area.setBounds(20,75,250,200);
    b=new JButton("Count Words");
    b.setBounds(100,300,120,30);
    b.addActionListener(this);
    f.add(l1);
f.add(l2);
f.add(area);
f.add(b);
    f.setSize(450,450);
    f.setLayout(null);
    f.setVisible(true);
}
public void actionPerformed(ActionEvent e)
{
    String text=area.getText();
    String words[]=text.split("\\s");
    l1.setText("Words: "+words.length);
    l2.setText("Characters: "+text.length());
}
public static void main(String[] args)
{
    new TextAreaExample();
}
}

```

Java JCheckBox Example: Food Order

```

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

```

```

public class CheckBoxExample extends JFrame implements ActionListener
{
    JLabel l;
    JCheckBox cb1,cb2,cb3;
    JButton b;
    CheckBoxExample()
{
    l=new JLabel("Food Ordering System");
    l.setBounds(50,50,300,20);
    cb1=new JCheckBox("Pizza @ 100");
    cb1.setBounds(100,100,150,20);
    cb2=new JCheckBox("Burger @ 30");
    cb2.setBounds(100,150,150,20);
    cb3=new JCheckBox("Tea @ 10");
    cb3.setBounds(100,200,150,20);
    b=new JButton("Order");
    b.setBounds(100,250,80,30);
    b.addActionListener(this);
    add(l);add(cb1);add(cb2);add(cb3);add(b);
    setSize(400,400);
    setLayout(null);
    setVisible(true);
    setDefaultCloseOperation(EXIT_ON_CLOSE);
}
public void actionPerformed(ActionEvent e)
{
    float amount=0;
    String msg="";
    if(cb1.isSelected())
{
        amount+=100;
        msg="Pizza: 100\n";
    }
    if(cb2.isSelected())
{
        amount+=30;
        msg+="Burger: 30\n";
    }
}
}

```

```

    }
    if(cb3.isSelected())
{
    amount+=10;
    msg+="Tea: 10\n";
    }
    msg+="-----\n";
    JOptionPane.showMessageDialog(this,msg+"Total: "+amount);
}
public static void main(String[] args)
{
    new CheckBoxExample();
}
}

```

Java JRadioButton Example with ActionListener

```

import javax.swing.*;
import java.awt.event.*;
class RadioButtonExample extends JFrame implements ActionListener
{
    JRadioButton rb1,rb2,rb3,rb4;
    JButton b;
    RadioButtonExample()
    {
        rb1=new JRadioButton("Male");
        rb1.setBounds(100,50,100,30);
        rb2=new JRadioButton("Female");
        rb2.setBounds(100,100,100,30);
        ButtonGroup bg=new ButtonGroup();
        bg.add(rb1);
        bg.add(rb2);
        b=new JButton("click");
        b.setBounds(100,150,80,30);
        b.addActionListener(this);
        add(rb1);
        add(rb2);
    }
}

```

```

add(b);
setSize(300,300);
setLayout(null);
setVisible(true);
}
public void actionPerformed(ActionEvent e)
{
if(rb1.isSelected())
{
JOptionPane.showMessageDialog(this,"You are Male.");
}
if(rb2.isSelected())
{
JOptionPane.showMessageDialog(this,"You are Female.");
}
}
public static void main(String args[])
{
new RadioButtonExample();
}}

```

Java JComboBox Example with ActionListener

```

import javax.swing.*;
import java.awt.event.*;
public class ComboBoxExample
{
JFrame f;
ComboBoxExample()
{
f=new JFrame("ComboBox Example");
final JLabel label = new JLabel();
label.setHorizontalAlignment(JLabel.CENTER);
label.setSize(400,100);
JButton b=new JButton("Show");
b.setBounds(200,100,75,20);
String languages[]{"C","C++","C#","Java","PHP"};

```



```

final JComboBox cb=new JComboBox(languages);
cb.setBounds(50, 100,90,20);
f.add(cb); f.add(label); f.add(b);
f.setLayout(null);
f.setSize(350,350);
f.setVisible(true);
b.addActionListener(new ActionListener()
{
    public void actionPerformed(ActionEvent e)
    {
String data = "Programming language Selected: " + cb.getItemAt(cb.getSelectedIn
dex());
label.setText(data);
    }
});
}
public static void main(String[] args)
{
    new ComboBoxExample();
}
}

```

Java JTable Example

```

import javax.swing.*;
public class TableExample
{
    JFrame f;
    TableExample()
    {
        f=new JFrame();
        String data[][]={ {"101","Amit","670000"},
                           {"102","Jai","780000"},
                           {"101","Sachin","700000"}};
        String column[]={"ID","NAME","SALARY"};
        JTable jt=new JTable(data,column);
        jt.setBounds(30,40,200,300);
    }
}

```

```

    JScrollPane sp=new JScrollPane(jt);
    f.add(sp);
    f.setSize(300,400);
    f.setVisible(true);
}
public static void main(String[] args)
{
    new TableExample();
}
}

```

Java JList Example with ActionListener

```

import javax.swing.*;
import java.awt.event.*;
public class ListExample
{
    ListExample()
    {
        JFrame f= new JFrame();
        final JLabel label = new JLabel();
        label.setSize(500,100);
        JButton b=new JButton("Show");
        b.setBounds(200,150,80,30);
        final DefaultListModel<String> l1 = new DefaultListModel<>();
        l1.addElement("C");
        l1.addElement("C++");
        l1.addElement("Java");
        l1.addElement("PHP");
        final JList<String> list1 = new JList<>(l1);
        list1.setBounds(100,100, 75,75);
        DefaultListModel<String> l2 = new DefaultListModel<>();
        l2.addElement("Turbo C++");
        l2.addElement("Struts");
        l2.addElement("Spring");
        l2.addElement("YII");
    }
}

```

```

    final JList<String> list2 = new JList<>(l2);
    list2.setBounds(100,200, 75,75);
    f.add(list1); f.add(list2); f.add(b); f.add(label);
    f.setSize(450,450);
    f.setLayout(null);
    f.setVisible(true);
    b.addActionListener(new ActionListener()
    {
        public void actionPerformed(ActionEvent e)
        {
            String data = "";
            if (list1.getSelectedIndex() != -1)
            {
                data = "Programming language Selected: " + list1.getSelectedValue();
                label.setText(data);
            }
            if(list2.getSelectedIndex() != -1)
            {
                data += ", FrameWork Selected: ";
                for(Object frame :list2.getSelectedValues())
                {
                    data += frame + " ";
                }
            }
            label.setText(data);
        }
    });
}
public static void main(String args[])
{
    new ListExample();
}
}

```

Java JScrollBar Example with AdjustmentListener

```

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

```

```

class ScrollBarExample
{
ScrollBarExample()
{
    JFrame f= new JFrame("Scrollbar Example");
    final JLabel label = new JLabel();
    label.setHorizontalAlignment(JLabel.CENTER);
    label.setSize(400,100);
    final JScrollBar s=new JScrollBar();
    s.setBounds(100,100, 50,100);
    f.add(s); f.add(label);
    f.setSize(400,400);
    f.setLayout(null);
    f.setVisible(true);
    s.addAdjustmentListener(new AdjustmentListener()
    {
        public void adjustmentValueChanged(AdjustmentEvent e)
        {
            label.setText("Vertical Scrollbar value is:"+ s.getValue());
        }
    });
}
public static void main(String args[])
{
    new ScrollBarExample();
}}

```

Java JMenuItem and JMenu Example

```

import javax.swing.*;
class MenuExample
{
    JMenu menu, submenu;
    JMenuItem i1, i2, i3, i4, i5;
    MenuExample()
    {
        JFrame f= new JFrame("Menu and MenuItem Example");

```

```

    JMenuBar mb=new JMenuBar();
    menu=new JMenu("Menu");
    submenu=new JMenu("Sub Menu");
    i1=new JMenuItem("Item 1");
    i2=new JMenuItem("Item 2");
    i3=new JMenuItem("Item 3");
    i4=new JMenuItem("Item 4");
    i5=new JMenuItem("Item 5");
    menu.add(i1); menu.add(i2); menu.add(i3);
    submenu.add(i4); submenu.add(i5);
    menu.add(submenu);
    mb.add(menu);
    f.setJMenuBar(mb);
    f.setSize(400,400);
    f.setLayout(null);
    f.setVisible(true);
}
public static void main(String args[])
{
new MenuExample();
}}

```

Java JProgressBar Example

```

import javax.swing.*;
public class ProgressBarExample extends JFrame
{
JProgressBar jb;
int i=0,num=0;
ProgressBarExample()
{
jb=new JProgressBar(0,2000);
jb.setBounds(40,40,160,30);
jb.setValue(0);
jb.setStringPainted(true);
add(jb);
setSize(250,150);
}
}

```

```

setLayout(null);
}
public void iterate()
{
while(i<=2000)
{
    jb.setValue(i);
    i=i+20;
    try
    {
        Thread.sleep(150);
    }
    catch(Exception e)
    {}
} }
public static void main(String[] args)
{
    ProgressBarExample m=new ProgressBarExample();
    m.setVisible(true);
    m.iterate();
}
}

```

JOptionPane

```

import javax.swing.*;
public class OptionPaneExample
{
    JFrame f;
    OptionPaneExample()
    {
        f=new JFrame();
        JOptionPane.showMessageDialog(f,"Hello, Welcome to Javatpoint.");
    }
public static void main(String[] args)
{
    new OptionPaneExample();
}
}

```

```
}  
}
```

JSplitPane and JScrollPane

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.MouseAdapter;  
import java.awt.event.MouseEvent;  
public class SplitPaneDemo extends JFrame  
{  
    JSplitPane sp;  
    JLabel lblimage;  
    JList lstplanet;  
    public SplitPaneDemo()  
    {  
        super("SplitPane Test");  
        sp=new JSplitPane();  
        String  
        planet[]={ "Mercury", "Venus", "Earth", "Mars", "Jupiter", "Saturn", "Uranus", "Neptun  
e", "Pluto"};  
        lblimage=new JLabel();  
        lstplanet=new JList(planet);  
        sp.add(lstplanet,JSplitPane.LEFT);  
        sp.add(lblimage,JSplitPane.RIGHT);  
        setLayout(new FlowLayout());  
        add(sp);  
        setVisible(true);  
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);  
        setSize();  
        lstplanet.addMouseListener(new MouseAdapter()  
        {  
            @Override  
            public void mouseClicked(MouseEvent e)  
            {  
                if(lstplanet.getSelectedValue().equals("Mercury"))  
                    lblimage.setIcon(new ImageIcon("Mercury.jpg"));  
            }  
        }  
    }  
}
```

```

if(lstplanet.getSelectedValue().equals("Venus"))
    lblimage.setIcon(new ImageIcon("Venus.jpg"));
if(lstplanet.getSelectedValue().equals("Earth"))
    lblimage.setIcon(new ImageIcon("Earth.jpg"));
if(lstplanet.getSelectedValue().equals("Mars"))
    lblimage.setIcon(new ImageIcon("Mars.jpg"));
if(lstplanet.getSelectedValue().equals("Jupiter"))
    lblimage.setIcon(new ImageIcon("Jupiter.jpg"));
if(lstplanet.getSelectedValue().equals("Saturn"))
    lblimage.setIcon(new ImageIcon("Saturn.jpg"));
if(lstplanet.getSelectedValue().equals("Uranus"))
    lblimage.setIcon(new ImageIcon("Uranus.jpg"));
if(lstplanet.getSelectedValue().equals("Neptune"))
    lblimage.setIcon(new ImageIcon("Neptune.jpg"));
if(lstplanet.getSelectedValue().equals("Pluto"))
    lblimage.setIcon(new ImageIcon("Pluto.jpg"));
});
}
public static void main(String[] args)
{
    new SplitPaneDemo();
}

```

JTabbedPane

```

import javax.swing.*.*;
public class TabbedPaneExample
{
    JFrame f;
    TabbedPaneExample()
    {
        f=new JFrame();
        JTextArea ta=new JTextArea(200,200);
        JPanel p1=new JPanel();
        p1.add(ta);
        JPanel p2=new JPanel();

```



```

JPanel p3=new JPanel();
JTabbedPane tp=new JTabbedPane();
tp.setBounds(50,50,200,200);
tp.add("main",p1);
tp.add("visit",p2);
tp.add("help",p3);
f.add(tp);
f.setSize(400,400);
f.setLayout(null);
f.setVisible(true);
}
public static void main(String[] args)
{
    new TabbedPaneExample();
}
}

```

Java JSlider Example

```

import javax.swing.*;
public class SliderExample1 extends JFrame
{
    public SliderExample1()
    {
        JSlider slider = new JSlider(JSlider.HORIZONTAL, 0, 50, 25);
        JPanel panel=new JPanel();
        panel.add(slider);
        add(panel);
    }
    public static void main(String s[])
    {
        SliderExample1 frame=new SliderExample1();
        frame.pack();
        frame.setVisible(true);
    }
}

```

Java JSlider Example: painting ticks and JPanel

```
import javax.swing.*;
public class SliderExample extends JFrame
{
public SliderExample()
{
JSlider slider = new JSlider(JSlider.HORIZONTAL, 0, 50, 25);
slider.setMinorTickSpacing(2);
slider.setMajorTickSpacing(10);
slider.setPaintTicks(true);
slider.setPaintLabels(true);

JPanel panel=new JPanel();
panel.add(slider);
add(panel);
}
public static void main(String s[])
{
SliderExample frame=new SliderExample();
frame.pack();
frame.setVisible(true);
}
}
```

Java JColorChooser Example

```
import java.awt.event.*;
import java.awt.*;
import javax.swing.*;
public class ColorChooserExample extends JFrame implements ActionListener
{
JButton b;
Container c;
ColorChooserExample()
{
c=getContentPane();
```

```

c.setLayout(new FlowLayout());
b=new JButton("color");
b.addActionListener(this);
c.add(b);
}
public void actionPerformed(ActionEvent e)
{
Color initialcolor=Color.RED;
Color color=JColorChooser.showDialog(this,"Select a color",initialcolor);
c.setBackground(color);
}
public static void main(String[] args)
{
ColorChooserExample ch=new ColorChooserExample();
ch.setSize(400,400);
ch.setVisible(true);
ch.setDefaultCloseOperation(EXIT_ON_CLOSE);
}
}

```

Java JTree Example

```

import javax.swing.*.*;
import javax.swing.tree.DefaultMutableTreeNode;
public class TreeExample
{
JFrame f;
TreeExample()
{
f=new JFrame();
DefaultMutableTreeNode style=new DefaultMutableTreeNode("Style");
DefaultMutableTreeNode color=new DefaultMutableTreeNode("color");
DefaultMutableTreeNode font=new DefaultMutableTreeNode("font");
style.add(color);
style.add(font);
DefaultMutableTreeNode red=new DefaultMutableTreeNode("red");
DefaultMutableTreeNode blue=new DefaultMutableTreeNode("blue");

```

```

DefaultMutableTreeNode black=new DefaultMutableTreeNode("black");
DefaultMutableTreeNode green=new DefaultMutableTreeNode("green");
color.add(red); color.add(blue); color.add(black); color.add(green);
JTree jt=new JTree(style);
f.add(jt);
f.setSize(200,200);
f.setVisible(true);
}
public static void main(String[] args)
{
    new TreeExample();
}

```

Java JFileChooser Example

```

import javax.swing.*;
import java.awt.event.*;
import java.io.*;
public class FileChooserExample extends JFrame implements ActionListener
{
    JMenuBar mb;
    JMenu file;
    JMenuItem open;
    JTextArea ta;
    FileChooserExample()
    {
        open=new JMenuItem("Open File");
        open.addActionListener(this);
        file=new JMenu("File");
        file.add(open);
        mb=new JMenuBar();
        mb.setBounds(0,0,800,20);
        mb.add(file);
        ta=new JTextArea(800,800);
        ta.setBounds(0,20,800,800);
        add(mb);
        add(ta);
    }
}

```

```

}
public void actionPerformed(ActionEvent e)
{
if(e.getSource()==open)
{
    JFileChooser fc=new JFileChooser();
    int i=fc.showOpenDialog(this);
    if(i==JFileChooser.APPROVE_OPTION) \\ OK Option
    {
        File f=fc.getSelectedFile();
        String filepath=f.getPath();
        try
        {
            BufferedReader br=new BufferedReader(new FileReader(filepath));
            String s1="",s2="";
            while((s1=br.readLine())!=null)
            {
                s2+=s1+"\n";
            }
            ta.setText(s2);
            br.close();
        }catch (Exception ex)
        {
            ex.printStackTrace(); \\ exception stack trace to detect bugs
        } } }
public static void main(String[] args)
{
    FileChooserExample om=new FileChooserExample();
    om.setSize(500,500);
    om.setLayout(null);
    om.setVisible(true);
    om.setDefaultCloseOperation(EXIT_ON_CLOSE);
}
}

```

Java JSeparator

```

import javax.swing.*;
class SeparatorExample
{
    JMenuItem menu, submenu;
    JMenuItem i1, i2, i3, i4, i5;
    SeparatorExample()
{
    JFrame f= new JFrame("Separator Example");
    JMenuBar mb=new JMenuBar();
    menu=new JMenuItem("Menu");
    i1=new JMenuItem("Item 1");
    i2=new JMenuItem("Item 2");
    menu.add(i1);
    menu.addSeparator();
    menu.add(i2);
    mb.add(menu);
    f.setJMenuBar(mb);
    f.setSize(400,400);
    f.setLayout(null);
    f.setVisible(true);
}
public static void main(String args[])
{
new SeparatorExample();
}}

```

Java JPopupMenu Example

```

import javax.swing.*;
import java.awt.event.*;
class PopupMenuExample
{
    PopupMenuExample()
{
    final JFrame f= new JFrame("PopupMenu Example");
    final JPopupMenu popupmenu = new JPopupMenu("Edit");
    JMenuItem cut = new JMenuItem("Cut");

```

```

        JMenuItem copy = new JMenuItem("Copy");
        JMenuItem paste = new JMenuItem("Paste");
        popupmenu.add(cut);
    popupmenu.add(copy);
    popupmenu.add(paste);
    f.addMouseListener(new MouseAdapter()
    {
        public void mouseClicked(MouseEvent e)
        {
            popupmenu.show(f , e.getX(), e.getY());
        }
    });
    f.add(popupmenu);
    f.setSize(300,300);
    f.setLayout(null);
    f.setVisible(true);
}
public static void main(String args[])
{
    new PopupMenuExample();
}

```

Simple ToolTip Example

```

import javax.swing.*;
public class ToolTipExample
{
    public static void main(String[] args)
    {
        JFrame f=new JFrame("Password Field Example");
        //Creating PasswordField and label
        JPasswordField value = new JPasswordField();
        value.setBounds(100,100,100,30);
        value.setToolTipText("Enter your Password");
        JLabel l1=new JLabel("Password:");
        l1.setBounds(20,100, 80,30);
        //Adding components to frame
    }
}

```

```
f.add(value); f.add(l1);
f.setSize(300,300);
f.setLayout(null);
f.setVisible(true);
}
}
```

Java JPasswordField Example

```
import javax.swing.*;
public class PasswordFieldExample
{
    public static void main(String[] args)
    {
        JFrame f=new JFrame("Password Field Example");
        JPasswordField value = new JPasswordField();
        JLabel l1=new JLabel("Password:");
        l1.setBounds(20,100, 80,30);
        value.setBounds(100,100,100,30);
        f.add(value);
        f.add(l1);
        f.setSize(300,300);
        f.setLayout(null);
        f.setVisible(true);
    }
}
```

JDesktopPane

```
import javax.swing.JFrame;
import javax.swing.JDesktopPane;
import javax.swing.JInternalFrame;
import javax.swing.JButton;
import java.awt.FlowLayout;
class JInternalFrameTest extends JFrame
{
```



```

private JDesktopPane jd = new JDesktopPane();
JInternalFrameTest()
{
setTitle("JInternalFrame");
setJInternalFrame(jd,"InternalFrame1",30,30);
setJInternalFrame(jd,"InternalFrame2",60,60);
setJDesktopPane();
setSize(700,400);
setVisible(true);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
}
void setJDesktopPane()
{
add(jd);
}
void setJInternalFrame(JDesktopPane jd,String name,int loc1,int loc2)
{
JInternalFrame jn = new JInternalFrame(name, true, true, true, true); //title,
resizable, closable, maximizable, iconifiable
jn.setLayout(new FlowLayout());
jn.setSize(300, 300);
jn.add(new JButton("JButton"));
jn.setLocation(loc2, loc2);
jn.setVisible(true);
jd.add(jn);
}
}
public class Javaapp
{
public static void main(String[] args)
{
JInternalFrameTestjn = new JInternalFrameTest();
}
}

```

JInternalFrame

```

import javax.swing.JFrame;
import javax.swing.JInternalFrame;
import javax.swing.JButton;
import java.awt.FlowLayout;
class JInternalFrameTest extends JFrame
{
    JInternalFrameTest()
    {
        setTitle("JInternalFrame");
        setJInternalFrame();
        setSize(700,300);
        setVisible(true);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
    void setJInternalFrame()
    {
        JInternalFrame jn = new JInternalFrame("InternalFrame",true,true,true);
        jn.setLayout(new FlowLayout());
        jn.add(new JButton("JButton"));
        jn.setVisible(true);
        add(jn);
    }
}
public class Javaapp
{
    public static void main(String[] args)
    {
        JInternalFrameTest jn = new JInternalFrameTest();
    }
}

```

JLayeredPane

```

import javax.swing.*;
import java.awt.*;
public class LayeredPaneExample extends JFrame
{

```

```

public LayeredPaneExample()
{
    super("LayeredPane Example");
    setSize(200, 200);
    JLayeredPane pane = getLayeredPane();
    //creating buttons
    JButton top = new JButton();
    top.setBackground(Color.white);
    top.setBounds(20, 20, 50, 50);
    JButton middle = new JButton();
    middle.setBackground(Color.red);
    middle.setBounds(40, 40, 50, 50);
    JButton bottom = new JButton();
    bottom.setBackground(Color.cyan);
    bottom.setBounds(60, 60, 50, 50);
    //adding buttons on pane
    pane.add(bottom, new Integer(1));
    pane.add(middle, new Integer(2));
    pane.add(top, new Integer(3));
}
public static void main(String[] args)
{
    LayeredPaneExample panel = new LayeredPaneExample();
    panel.setVisible(true);
}

```

JCheckboxMenuItem

```

import javax.swing.*.*;
import java.awt.*.*;
class JCheckBoxMenuItemExample extends JFrame
{
    JMenuBar mb;
    JMenu m;
    JCheckBoxMenuItem m1,m2,m3,m4,m5,m6,m7;
    public JCheckBoxMenuItemExample()
    {

```

```

    createAndShowGUI();
}
private void createAndShowGUI()
{
    setTitle("JCheckBoxMenuItem Example");
    setDefaultCloseOperation(EXIT_ON_CLOSE);
    setLayout(new FlowLayout());

    mb=new JMenuBar();
    m=new JMenu("Menu");
        m1=new JCheckBoxMenuItem("Item 1");
    m2=new JCheckBoxMenuItem("Item 2");
    m3=new JCheckBoxMenuItem("Item 3");
    m4=new JCheckBoxMenuItem("Item 4");
    m5=new JCheckBoxMenuItem("Item 5");
    m6=new JCheckBoxMenuItem("Item 5");
    m7=new JCheckBoxMenuItem("Item 6");
    // Set text
    m1.setText("Item 1");
    m1.setState(true);
    // m1.setSelected(true);
    // disable m4
    m4.setEnabled(false);
    m.add(m1);
    m.add(m2);
    m.add(m3);
    m.add(m4);
    m.add(m5);
    m.add(m6);
    m.add(m7);
    mb.add(m);
    setJMenuBar(mb);
    setSize(400,400);
    setVisible(true);
}

public static void main(String args[])

```

```
{
    new JCheckBoxMenuItemExample();
}
}
```

JTableHeader

```
import java.awt.BorderLayout;
import javax.swing.JPanel;
import javax.swing.JTable;
import javax.swing.table.JTableHeader;

public class Main
{
    public static void main(String[] argv) throws Exception
    {
        int rows = 10;
        int cols = 5;
        JTable table = new JTable(rows, cols);
        JTableHeader header = table.getTableHeader();
        JPanel container = new JPanel(new BorderLayout());
        // Add header in NORTH slot
        container.add(header, BorderLayout.NORTH);
        // Add table itself to CENTER slot
        container.add(table, BorderLayout.CENTER);
    }
}
```

JToolBar

```
import java.awt.BorderLayout;
import java.awt.Container;
import javax.swing.JButton;
import javax.swing.JComboBox;
import javax.swing.JFrame;
import javax.swing.JScrollPane;
```

```

import javax.swing.JTextArea;
import javax.swing.JToolBar;

public class ToolBarSample
{
    public static void main(final String args[])
    {
        JFrame frame = new JFrame("JToolBar Example");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        JToolBar toolbar = new JToolBar();
        toolbar.setRollover(true);
        JButton button = new JButton("button");
        toolbar.add(button);
        toolbar.addSeparator();
        toolbar.add(new JButton("button 2"));
        toolbar.add(new JComboBox(new String[]{"A", "B", "C"}));
        Container contentPane = frame.getContentPane();
        contentPane.add(toolbar, BorderLayout.NORTH);
        JTextArea textArea = new JTextArea();
        JScrollPane pane = new JScrollPane(textArea);
        contentPane.add(pane, BorderLayout.CENTER);
        frame.setSize(350, 150);
        frame.setVisible(true);
    }
}

```

JRadioButtonMenuItem

```

import javax.swing.ButtonGroup;
import javax.swing.JFrame;
import javax.swing.JMenu;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;

```

```

import javax.swing.JRadioButtonMenuItem;

public class JavaRadioButtonMenuItem
{
    public static void main(final String args[])
    {
        JFrame frame = new JFrame("MenuSample Example");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        JMenuBar menuBar = new JMenuBar();
        JMenu fileMenu = new JMenu("File");
        menuBar.add(fileMenu);
        JMenuItem newItem = new JMenuItem("New");
        fileMenu.add(newItem);
        JMenu findOptionsMenu = new JMenu("Options");
        fileMenu.add(findOptionsMenu);
        ButtonGroup directionGroup = new ButtonGroup();
        JRadioButtonMenuItem forwardMenuItem = new
JRadioButtonMenuItem("Forward", true);
        findOptionsMenu.add(forwardMenuItem);
        directionGroup.add(forwardMenuItem);
        JRadioButtonMenuItem backwardMenuItem = new
JRadioButtonMenuItem("Backward");
        findOptionsMenu.add(backwardMenuItem);
        directionGroup.add(backwardMenuItem);
        frame.setJMenuBar(menuBar);
        frame.setSize(350, 250);
        frame.setVisible(true);
    }
}

```

JRootPane

```

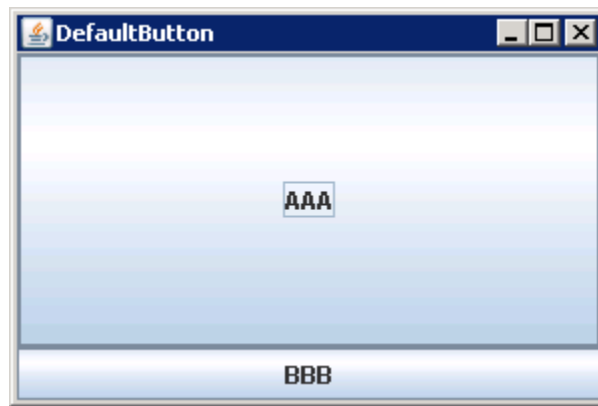
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JRootPane;

```

```

public class SettingDefaultButtonJRootPane
{
    public static void main(String args[])
    {
        JFrame frame = new JFrame("DefaultButton");
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        JButton button4 = new JButton("AAA");
        frame.add(button4,"Center");
        frame.add(new JButton("BBB"),"South");
        JRootPane rootPane = frame.getRootPane();
        rootPane.setDefaultButton(button4);
        frame.setSize(300, 200);
        frame.setVisible(true);
    }
}

```



JEditorPane

```

import java.net.URL;
import javax.swing.JEditorPane;
import javax.swing.JFrame;
import javax.swing.JScrollPane;
public class LoadingWebPageToJEditorPane
{
    public static void main(String[] a)throws Exception
    {
        JFrame frame = new JFrame();
    }
}

```



```

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
JEditorPane editorPane = new JEditorPane();
editorPane.setPage(new URL("http://www.java2s.com"));
frame.add(new JScrollPane(editorPane));
frame.setSize(300, 200);
frame.setVisible(true);
}
}

```

JViewport

```

import java.awt.*;
import javax.swing.*;
import java.awt.event.*;
public class JavaExampleScrollPictureInJApplet extends JApplet
{
    public JavaExampleScrollPictureInJApplet()
    {
        Container Cntnr = getContentPane();
        JViewport ViewPrt = new JViewport();
        JPanel Pnl = new JPanel();
        Pnl.add(new JLabel(new ImageIcon("Koala.jpg")));
        ViewPrt.setView(Pnl);
        Cntnr.add(ViewPrt, BorderLayout.CENTER);
        Cntnr.add(new ButtonPanel(ViewPrt), BorderLayout.SOUTH);
    }
}

class ButtonPanel extends JPanel implements ActionListener
{
    JViewport ViewPrt;
    JButton BtnLft = new JButton("Scroll Left");
    JButton BtnUp = new JButton("Scroll UP");
    JButton BtnDwn = new JButton("Scroll Down");
    JButton BtnRght = new JButton("Scroll Right");
    public ButtonPanel(JViewport VwPort)
    {
        ViewPrt = VwPort;
    }
}

```

```

        add(BtnLft);
        add(BtnUp);
        add(BtnDwn);
        add(BtnRght);
        BtnLft.addActionListener(this);
        BtnUp.addActionListener(this);
        BtnDwn.addActionListener(this);
        BtnRght.addActionListener(this);
    }
    public void actionPerformed(ActionEvent e1)
    {
        Point Pstn = ViewPrt.getViewPosition();
        if(e1.getSource() == BtnLft) Pstn.x += 10;
        else if(e1.getSource() == BtnUp) Pstn.y += 10;
        else if(e1.getSource() == BtnDwn) Pstn.y -= 10;
        else if(e1.getSource() == BtnRght) Pstn.x -= 10;
        ViewPrt.setViewPosition(Pstn);
    }
}
/*<APPLET CODE=JavaExampleScrollPictureInJApplet.class
WIDTH=700 HEIGHT=200 ></APPLET>*/

```

JTextPane

```

import java.awt.*;
import javax.swing.*;
public class JavaExampleTextPaneInJApplet extends JApplet
{
    JTextPane TxtPn = new JTextPane();
    public void init()
    {
        Container Cntr = getContentPane();
        TxtPn.setFont(new Font("Times-Roman", Font.BOLD, 18));
        TxtPn.setText("Welcome To Java");
        Cntr.add(TxtPn);
    }
}

```

```
/*<APPLET CODE=JavaExampleTextPaneInJApplet.class WIDTH=360  
HEIGHT=290> </APPLET>*/
```