

Java Applet:

What is an applet? An applet is a Java program that can be embedded into a web page. It runs inside the web browser and works at client side. An applet is embedded in an HTML page using the APPLET or OBJECT tag and hosted on a web server.

Important points :

1. All applets are sub-classes (either directly or indirectly) of *java.applet.Applet* class.
2. Applets are not stand-alone programs. Instead, they run within either a web browser or an applet viewer. JDK provides a standard applet viewer tool called applet viewer.
3. In general, execution of an applet does not begin at main() method.
4. Output of an applet window is not performed by *System.out.println()*. Rather it is handled with various **AWT** methods (**Abstract Window Toolkit**), such as *drawString()*, and other graphics related methods.

1.

```
import java.applet.Applet;
import java.awt.Graphics;
public class myappletone extends Applet{
    public void paint(Graphics g){
        //g.drawString("welcome",50,50);
        g.drawString("This is my First Applet",20,100);}}
```

2.

```
import java.applet.Applet;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.FontMetrics;
import java.awt.Graphics;
public class NumCount extends Applet implements Runnable{
    int counter;
    Thread t;
    public void init(){
        counter = 0;
        t = new Thread(this);
        t.start();    }

    public void run(){
        try{

            while(true){
                repaint();
                Thread.sleep(800);
                ++counter;
            }
        } catch(Exception e){
        }

        public void paint(Graphics g){
            g.setFont(new Font("Serif",Font.BOLD,40));
            FontMetrics fm = g.getFontMetrics();
            String s = "" + counter;
            Dimension d = getSize();
            int x = d.width/2 - fm.stringWidth(s)/2;
            int y = d.height/2;
            g.drawString(s,x,y);    }}
```

3.

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

public class MyCalc extends Applet implements ActionListener{
    TextField t1 = new TextField(16);
    TextField t2 = new TextField(16);
    TextField t3 = new TextField(16);
    TextField t4= new TextField(16);
    Label l1 = new Label("FIRST NO=");
    Label l2 = new Label("SECOND NO=");
    Label l3 = new Label("SUM=");
    Label l4 = new Label("DIFF=");
    Button b1 = new Button("ADD");
    Button b2 = new Button("SUB");
    public void init()
    {
        t1.setBackground(Color.yellow);
        t1.setForeground(Color.black);
        add(l1);
        add(t1);
        t2.setBackground(Color.yellow);
        t2.setForeground(Color.black);
        add(l2);
        add(t2);
        t3.setBackground(Color.yellow);
        //add(l3);
        add(t3);
        add(b1);
        b1.addActionListener(this);
        t4.setBackground(Color.yellow);
        //add(l4);
        add(t4);
        add(b2);
        b2.addActionListener(this);
    }

    public void actionPerformed(ActionEvent e)
    {
        if (e.getSource() == b1)
        {
            // int n1 = Integer.parseInt(t1.getText());
            float n1=Float.parseFloat(t1.getText());
            // int n2 = Integer.parseInt(t2.getText());
            float n2=Float.parseFloat(t2.getText());
            t3.setText(" " + (n1 + n2));
        }
        if (e.getSource() == b2)
        {
            // int n1 = Integer.parseInt(t1.getText());
            float n1=Float.parseFloat(t1.getText());
            // int n2 = Integer.parseInt(t2.getText());
            float n2=Float.parseFloat(t2.getText());
            t4.setText(" " + (n1 - n2));
        }
    }
}
```