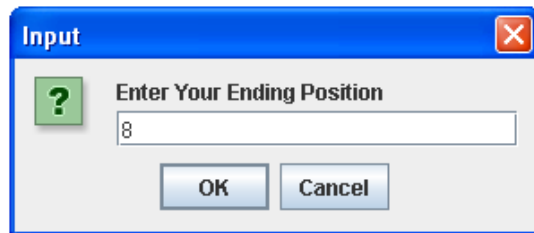
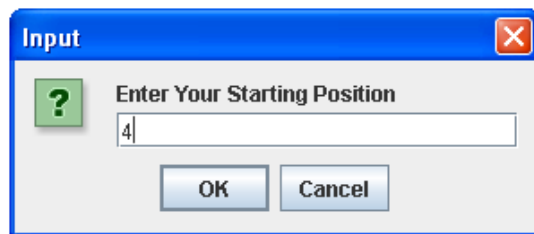
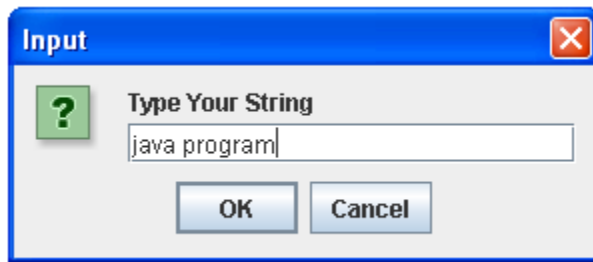


PROGRAM- 1

/* String Extraction */

```
import javax.swing.*;  
public class inputtest  
{  
    public static void main(String args[])  
    {  
        String sub;  
        String s1= JOptionPane.showInputDialog("Type Your String");  
        String i=JOptionPane.showInputDialog("Enter Your Starting Position");  
        int i1=Integer.parseInt(i);  
  
        String j=JOptionPane.showInputDialog("Enter Your Ending Position");  
        int j1=Integer.parseInt(j);  
  
        if(i1<j1)  
        {  
            sub=s1.substring(i1,j1);  
            System.out.println("Original String is"+s1);  
            System.out.println("Substring is"+sub);  
        }  
        System.exit(0);  
    }  
}
```

OUTPUT :



U:\>javac inputtest.java

U:\>java inputtest

Original String isjava program
Substring is pro

U:\>

PROGRAM- 3

```
import java.lang.Exception;
import java.io.*;
class PayOutOfBounds extends Exception
{
    PayOutOfBounds (String message)
    {
        super (message);
    }
}

class payout
{
    public static void main(String args[])
    {
        String name;
        int amt=0;
        String ac;
        try
        {
            DataInputStream in=new DataInputStream (System.in);
            System.out.println("\t name");
            System.out.flush();
            name=in.readLine();
            System.out.println("\t account no:");
            System.out.flush();
            ac=in.readLine();
            System.out.println("\t Amount:");
            System.out.flush();
            String amtstring=in.readLine();
            amt=Integer.parseInt(amtstring);
            if(amt>10000)
            {
                throw new PayOutOfBounds("cannot proceed");
            }
            else
            {
                System.out.println("Proceeding to Withdrawal..... pls Wait");
            }
        }
    }
}
```

```

        catch(PayOutOfBounds e)
        {
            System.out.println(" Caught PayOutOfBounds");
            System.out.println(e.getMessage());
        }
        catch(IOException e)
        {
            System.out.println("I/O Error");
            System.exit(1);
        }
    }
}

```

OUTPUT :

U:\>javac payout.java

Note: payout.java uses or overrides a deprecated API.

Note: Recompile with -deprecation for details.

U:\>java payout

Name : Sona

account no: 100

Amount: 5000

Proceeding to Withdrawal..... pls Wait

U:\>java payout

Name : SNGC

account no:100

Amount: 15000

Caught PayOutOfBounds

cannot proceed

PROGRAM - 4

/* MULTI THREADING */

```
class a extends Thread
{
    public void run()
    {
        for(int i=1;i<=5;i++)
        {
            System.out.println(i+"*"+5+"="+(i*5));
        }
    }
}

class b extends Thread
{
    public void run()
    {
        for(int j=1;j<=5;j++)
        {
            System.out.println(j+"*"+7+"="+(j*7));
        }
    }
}

class c extends Thread
{
    public void run()
    {
        for(int k=1;k<=5;k++)
        {
            System.out.println(k+"*"+3+"="+(k*3));
        }
    }
}

public class multithread
{
    public static void main(String args[])
    {
        a threadA = new a();
        b threadB = new b();
        c threadC= new c();
    }
}
```

```
        threadC.setPriority(Thread.MAX_PRIORITY);
        threadA.setPriority(Thread.MIN_PRIORITY);
        threadA.start();
        threadB.start();
        threadC.start();
    }
}
```

OUTPUT :

U:\>javac multithread.java

U:\>java multithread

1*5=5

1*3=3

1*7=7

2*5=10

2*3=6

2*7=14

3*5=15

3*3=9

3*7=21

4*5=20

4*3=12

4*7=28

5*5=25

5*3=15

5*7=35

PROGRAM – 5

```
/* DRAWING SHAPES */
```

```
/* several shapes */
```

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

```
import java.applet.*;
```

```
// <applet code=prg height=500 width=400></applet>
```

```
public class prg extends Applet
```

```
{
```

```
    public void paint(Graphics g)
```

```
    {
```

```
        g.setColor(Color.black);
```

```
        g.drawRect(10,20,50,50);
```

```
        g.drawOval(80,50,50,50);
```

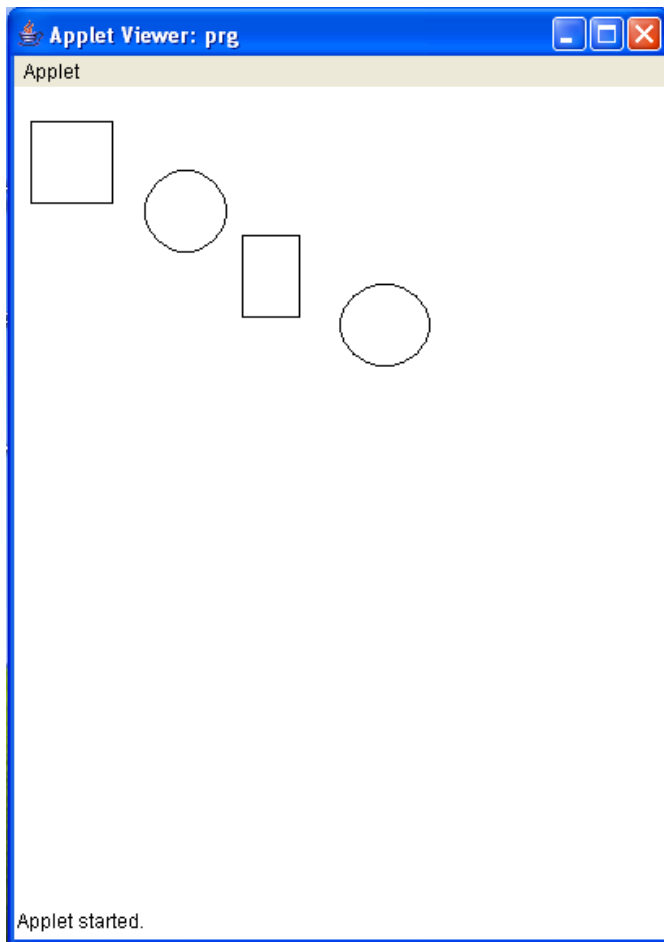
```
        g.drawRect(140,90,35,50);
```

```
        g.drawOval(200,120,55,50);
```

```
    }
```

```
}
```

OUTPUT :



PROGRAM – 6

/* My Details */

import java.applet.*;

import java.awt.*;

import java.awt.event.*;

//<applet code = me width=250 height=250></applet>

public class me extends Applet implements ActionListener

{

TextField t1,t2,t3,t4;

Button b1;

Frame f;

public void init()

{

f = new Frame("My Details");

f.setSize(200,200);

f = new Frame("My Details");

f.setLayout(new GridLayout(4,2));

f.setLayout(new FlowLayout(FlowLayout.LEFT,1,1));

f.setSize(300,300);

t1=new TextField(20);

f.add(t1);

t2=new TextField(20);

f.add(t2);

t3=new TextField(20);

f.add(t3);

t4=new TextField(20);

f.add(t4);

b1=new Button("ok");

f.add(b1);

b1.addActionListener(this);

f.show();

}

public void actionPerformed(ActionEvent e)

{

if(e.getSource()==b1)

{

t1.setText("SNGG");

t2.setText("K.G.Chavadi");

t3.setText("Coimbatore");

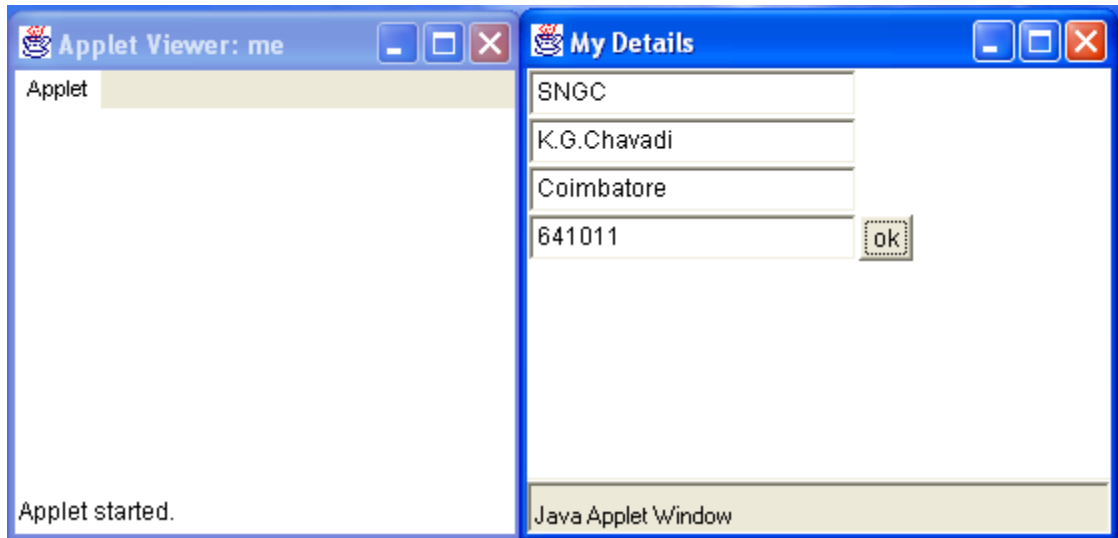
t4.setText("641011");

}

}

}

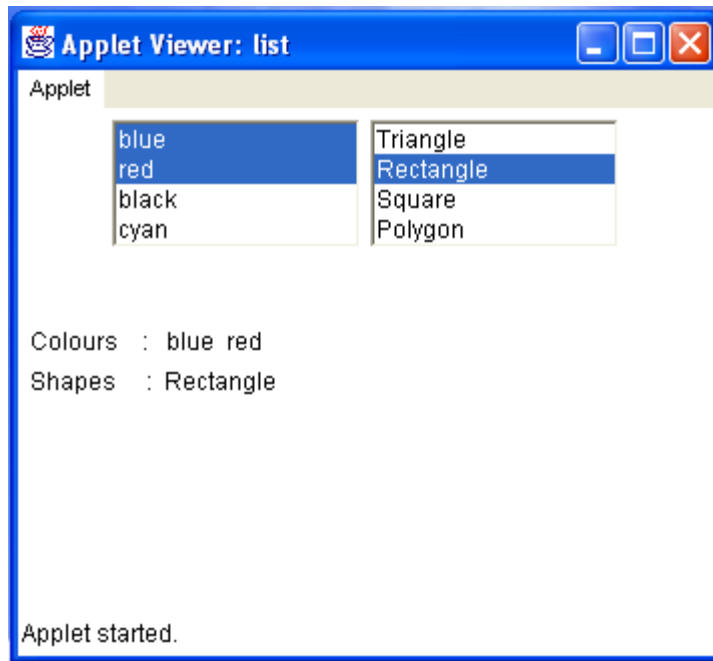
OUTPUT :



PROGRAM – 7

```
/*multi selection */  
import java.awt.*;  
import java.awt.event.*;  
import java.applet.*;  
//<applet code=list width=258 height=300> </applet>  
public class list extends Applet implements ActionListener  
{  
    List colours,shapes;  
    String msg=" ";  
    public void init()  
    {  
        colours=new List(4,true);  
        shapes=new List(4,false);  
        colours.add("blue");  
        colours.add("red");  
        colours.add("black");  
        colours.add("cyan");  
        shapes.add("Triagle");  
        shapes.add("Rectangle");  
        shapes.add("Square");  
        shapes.add("Polygon");  
        shapes.select(1);  
        add(colours);  
        add(shapes);  
        colours.addActionListener(this);  
        shapes.addActionListener(this);  
    }  
    public void actionPerformed(ActionEvent e)  
    {  
        repaint();  
    }  
    public void paint(Graphics g)  
    {  
        int idx[];  
        msg="Colours   : ";  
        idx=colours.getSelectedIndexes();  
        for(int i=0;i<idx.length;i++)  
            msg+=colours.getItem(idx[i])+" ";  
        g.drawString(msg,6,120);  
        msg="Shapes    : ";  
        msg+=shapes.getSelectedItem();  
        g.drawString(msg,6,140);  
    }  
}
```

OUTPUT :



PROGRAM – 9

```
/* MENU CONCEPT */
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
//<applet code=list1 width=250 height=250></applet>
public class list1 extends Frame implements ActionListener, WindowListener
{
    MenuBar bar=new MenuBar();
    Menu File=new Menu("File");

    Menu Edit=new Menu("Edit");
    Menu search=new Menu("Search");
    Menu quit=new Menu("Quit");

    MenuItem New= new MenuItem("New");
    MenuItem open= new MenuItem("Open");
    MenuItem save= new MenuItem("Save");
    MenuItem saveas= new MenuItem("SaveAs");
    MenuItem print= new MenuItem("Print");
    MenuItem cut= new MenuItem("Cut");
    MenuItem copy= new MenuItem("Copy");
    MenuItem Paste= new MenuItem("Paste");
    MenuItem find= new MenuItem("Find");
    MenuItem replace= new MenuItem("Replace");
    MenuItem exit= new MenuItem("Exit");
    public list1()
    {
        super("A SIMPLE MENU");
        setMenuBar(bar);
        bar.add(File);
        bar.add(Edit);
        bar.add(search);
        bar.add(quit);
        File.add(New);
        File.add(open);
        File.add(save);
        File.add(saveas);
        File.add(print);
        Edit.add(cut);
        Edit.add(copy);
        Edit.add(Paste);
        Edit.add(find);
        search.add(replace);
    }
}
```

```
        quit.add(exit);
        addWindowListener(this);
        exit.addActionListener(this);
        setSize(320,240);
        setVisible(true);
    }

    public void actionPerformed(ActionEvent e)
    {
        if(e.getSource()==exit)
            quitApp();
    }

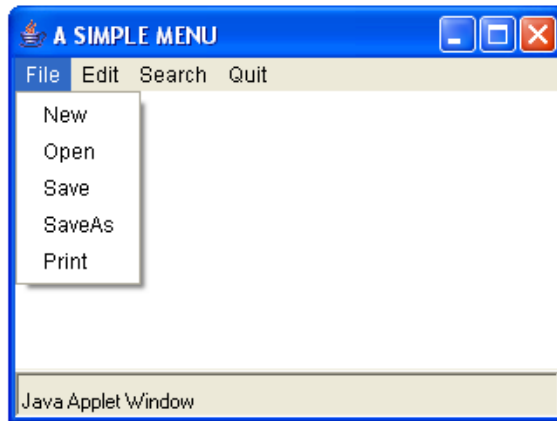
    public void windowClosed(WindowEvent e1)
    {
    }

    public void windowClosing(WindowEvent e1)
    {
        quitApp();
    }

    public void windowDeiconified(WindowEvent e1){}
    public void windowIconified(WindowEvent e1){}
    public void windowOpened(WindowEvent e1){}
    public void windowActivated(WindowEvent e1){}
    public void windowDeactivated(WindowEvent e1){}

    public void quitApp()
    {
        setVisible(false);
        dispose();
        System.exit(0);
    }
}
```

OUTPUT



PROGRAM – 10

```
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
//<applet code=mouseeventdemo height=250 width=250></applet>
```

```
public class mouseeventdemo extends Applet implements
MouseListener,MouseMotionListener
```

```
{
    Frame f;
    TextField t1;
```

```
public void init()
{
    addMouseListener(this);
    addMouseMotionListener(this);
    f= new Frame("Demo Frame");
    f.setSize(200,200);
    t1= new TextField(20);
    f.add(t1);
    f.show();
}
```

```
public void mouseReleased(MouseEvent me)
{
    f.show();
    t1.setText("Mouse Released");
}
```

```
public void mouseEntered(MouseEvent me)
{
    f.show();
    t1.setText("mouse Entered");
}
```

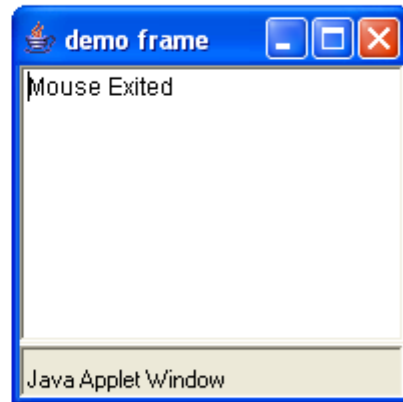
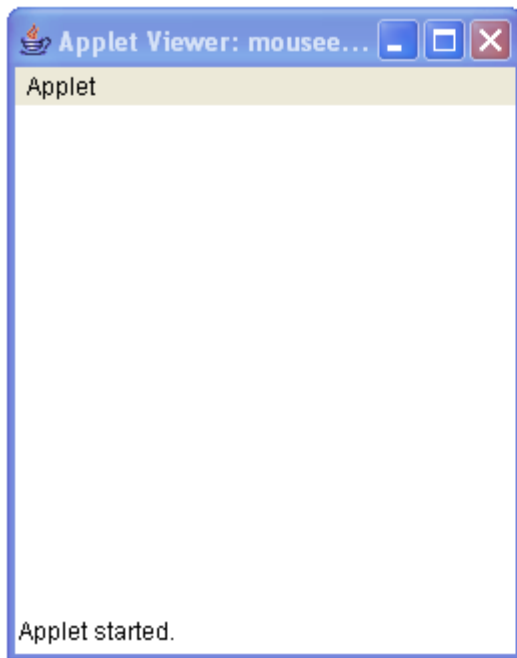
```
public void mouseMoved(MouseEvent me)
{
    f.show();
    t1.setText("Mouse Moved");
}
```

```
public void mouseExited(MouseEvent me)
{
    f.show();
    t1.setText("Mouse Exited");
}

public void mouseDragged(MouseEvent me)
{
    f.show();
    t1.setText("mouse Dragged");
}

public void mouseClicked(MouseEvent me)
{
    f.show();
    t1.setText("Mouse Clicked");
}
public void mousePressed(MouseEvent me)
{
    f.show();
    t1.setText("mouse Pressed");
}
}
```

OUTPUT :



PROGRAM - 11

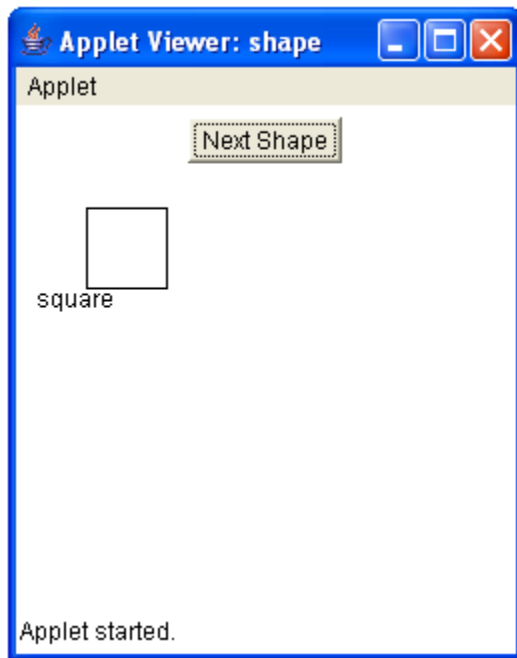
```
/* Button Shapes */
import java.awt.*;
import java.applet.*;

//<applet code=shape width=250 height=250></applet>

public class shape extends Applet
{
    int shape;
    Button button;
    public void init()
    {
        shape=0;
        button= new Button("Next Shape");
        add(button);
    }
    public void paint(Graphics g)
    {
        int x[]={35,150,60};
        int y[]={50,80,40};
        switch(shape)
        {
            case 0:
                g.drawString("square",10,100);
                g.drawRect(35,50,40,40);
                break;
            case 1:
                g.drawString("Rectangle",10,100);
                g.drawRect(35,50,80,40);
                break;
            case 2:
                g.drawString("Ellipse",10,100);
                g.drawOval(35,50,80,40);
                break;
            case 3:
                g.drawString("circle",10,100);
                g.drawOval(35,50,40,40);
                break;
        }
    }
}
```

```
public boolean action(Event event, Object obj)
{
    ++shape;
    if(shape==4)
    shape=0;
    repaint();
    return true;
}
}
```

OUTPUT :



PROGRAM – 12

```
import java.io.*;  
class p12  
{  
    public static void main(String args[])throws IOException  
    {  
        RandomAccessFile fi=null;  
        try  
        {  
            fi=new RandomAccessFile("prg12.txt","rw");  
            fi.seek(fi.length());  
            fi.writeBytes(" JAVA IS BETTER Than C++");  
            fi.close();  
        }  
        catch(Exception e)  
        {  
        }  
    }  
}
```

OUTPUT :

U:\> javac p12.java

U:\>java p12

U:\>type prg12.txt
JAVA IS BETTER THAN C++

PROGRAM – 8

```
import java.applet.Applet;
import java.awt.*;
import java.awt.event.*;
//<applet code=prg8 width=250 height=250></applet>

public class prg8 extends Applet
{
    Frame f;
    TextField t1=new TextField(20);
    TextField t2=new TextField(20);
    TextField t3=new TextField(20);
    TextArea t4= new TextArea(5,20);
    public void init()
    {
        f =new Frame("MULTI");
        f.setLayout(new GridLayout(4,2));
        f.setLayout(new FlowLayout(FlowLayout.LEFT,1,1));
        f.setSize(300,300);
        f.add(new Label("NAME"));
        f.add(t1);
        f.add(new Label("AGE"));
        f.add(t2);
        f.add(new Label("QUALIFICATION"));
        f.add(t3);
        f.add(new Label("ADDRESS"));
        f.add(t4);
        f.show();
        t1.setText("AISWARYA");
        t2.setText("30");
        t3.setText("MCA");
        t4.setText("55,MANNAT \n MUMBAI SOUTH \n INDIA");
    }
}
```

OUTPUT :

The screenshot shows two windows from an Applet Viewer. The left window, titled 'Applet Viewer: prg8', contains a tab labeled 'Applet' and a status bar at the bottom that says 'Applet started.'. The right window, titled 'MULTI', displays a form with the following fields:

- NAME: AISWARYA
- AGE: 30
- QUALIFICATION: MCA
- ADDRESS: 55, MANNAT, MUMBAI SOUTH

At the bottom of the 'MULTI' window is a status bar that says 'Java Applet Window'.

PROGRAM -2

```
/*INTERFACE CONCEPT */
interface intface1
{
    int r=12;
    double Area=0;
    double pi=3.14;
}
interface intface2
{
    public void computearea();
}
interface intface3 extends intface1,intface2
{
    public void displaycircle();
}
class sample implements intface3
{
    public void computearea()
    {
        double area=pi*r*r;
        System.out.println("\n \t Area :"+area);
    }

    public void displaycircle()
    {
        System.out.println("\n \t CIRCLE COMPUTE");
        System.out.println("\n \t OBJECT :CIRCLE");
        System.out.println("\n \t RADIUS:"+r);
    }
}
public class demo2
{
    public static void main(String args[])
    {
        sample s=new sample();
        s.displaycircle();
        s.computearea();
    }
}
```

OUTPUT :

U:\>javac demo2.java

U:\>java demo2

CIRCLE COMPUTE

OBJECT :CIRCLE

RADIUS:12

Area :452.15999999999997