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SUB: JAVA PRACTICAL PROGRAMS

Q1] Write a java program to display IP address and name of client machine

import java.net.\*;

class adprgm1

{

public static void main(String args[])

throws UnknownHostException

{

InetAddress i = InetAddress.getByName("localhost");

System.out.println(i);

System.out.println("IP Address: "+i.getHostAddress()+"\nName: "+i.getHostName());

}

}

/\*

C:\javaprograms\sem6>javac adprgm1.java

C:\javaprograms\sem6>java adprgm1

localhost/127.0.0.1

IP Address: 127.0.0.1

Name: localhost

\*/

Q3] prog 3

import java.lang.\*;

import java.util.\*;

class vowels extends Thread

{

String s1;

vowels(String s)

{

s1=s;

start();

}

public void run()

{

System.out.println("vowels are ");

for(int i=0; i<s1.length();i++)

{

char ch=s1.charAt(i);

if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u'||ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')

System.out.print(" "+ch);

}

}

}

public class q3

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

System.out.println("enter a string");

String str1=sc.next();

vowels v=new vowels(str1);

}

}

/\*

C:\Users\91762>cd\

C:\>cd javaprograms\sem6

C:\javaprograms\sem6>javac q3.java

C:\javaprograms\sem6>java q3

enter a string

Sanjana

vowels are

a

C:\javaprograms\sem6>

\*/

-------------------------------------------------------------------------------------------------------------------------------

Q5] import java.applet.\*;

import java.awt.\*;

class q5 extends Applet implements Runnable

{

Thread t;

int r,g1,y,i;

public void init()

{

T=new Thread(this);

t.start();

r=0;g1=0;i=0;y=0;

}

public void run()

{

try

{

for(i=24;i>=1;i--)

{

if(i>16&&i<=24)

{

t.sleep(200);

r=1;

repaint();

}

if(i>8&&i<=16)

{

t.sleep(200);

y=1;

repaint();

}

if(i>1&&i<=8)

{

t.sleep(200);

g1=1;

repaint();

}

}

if(i==0)

{

run();

}

}

catch(Exception e)

{

System.out.println(e);

}

}

public void paint(Graphics g)

{

g.drawRect(100,100,100,300);

if(r==1)

{

g.setColor(Color.red);

g.fillOval(100,100,100,100);

g.setColor(Color.black);

g.drawOval(100,200,100,100);

g.drawOval(100,300,100,100);

r=0;

}

if(y==1)

{

g.setColor(Color.black);

g.drawOval(100,100,100,100);

g.drawOval(100,300,100,100);

g.setColor(Color.yellow);

g.fillOval(100,200,100,100);

y=0;

}

if(g1==1)

{

g.setColor(color.Black);

g.drawOval(100,100,100,100)

g.drawOval(100,200,100,100)

g.setColor(Color.green);

g.fillOval(100,300,100,100);

g1=0;

}

}

}

------------------------------------------------------------------------------------------------------------------------------------

Q6] class Hellojava implements Runnable

{

Thread t;

public Hellojava(String title)

{

t=new Thread(this,title);

t.start();

}

public void run()

{

for(int i=0;i<20;i++)

{

System.out.println((i+1)+"ThreadName:"+Thread.currentThread().getName());

try{Thread.sleep(100);}

catch(Exception e){}

}

}

}

public class adprgm6

{

public static void main(String a[])

{

System.out.println("ThreadName: "+Thread.currentThread().getName());

Hellojava hj=new Hellojava("Hello java");

}

}

/\* C:\javaprograms\sem6>javac adprgm6.java

C:\javaprograms\sem6>java adprgm6

ThreadName: main

1ThreadName:Hello java

2ThreadName:Hello java

3ThreadName:Hello java

4ThreadName:Hello java

5ThreadName:Hello java

6ThreadName:Hello java

7ThreadName:Hello java

8ThreadName:Hello java

9ThreadName:Hello java

10ThreadName:Hello java

11ThreadName:Hello java

12ThreadName:Hello java

13ThreadName:Hello java

14ThreadName:Hello java

15ThreadName:Hello java

16ThreadName:Hello java

17ThreadName:Hello java

18ThreadName:Hello java

19ThreadName:Hello java

20ThreadName:Hello java

\*/

Q9] import java.awt.\*;  
import java.applet.\*;  
/\* <APPLET     code= "flag.class"  width= "500" height= "300">  
     </APPLET> \*/  
public class flag extends Applet implements Runnable  
{  
            Thread t;  
            int x1,x2,x3,y3,x4,y4,x5,ln;  
            public void init()  
            {  
                        t=new Thread(this);  
                        t.start();  
                        ln=1;  
            }  
            public void run()  
            {  
            try{      if(ln==1) {         for(x1=200;x1>100;)  
                                               {  
                                                       t.sleep(200);  
                                                       repaint();  
                                                }  
                                       }  
                        ln=2;  
                        if(ln==2) {        for(x2=100;x2<150;)  
                                                {  
                                                          t.sleep(200);  
                                                          repaint();  
                                                }  
                                      }  
                        ln=3;  
                        if(ln==3) {       for(x3=150,y3=100;x3>125&&y3<125;)  
                                               {  
                                                      t.sleep(200);  
                                                      repaint();  
                                              }  
                                          }  
                        ln=4;  
                        if(ln==4) {     for(x4=125,y4=125;x4<150&&y4<150;)  
                                            {  
                                                t.sleep(200);  
                                                repaint();  
                                            }  
                                       }  
                        ln=5;  
                        if(ln==5)  {     for(x5=150;x5>100;)  
                                             {  
                                                t.sleep(200);  
                                                repaint();  
                                              }  
                                        }  
                        ln=1;  
            }catch(Exception e){  
                                                      System.out.println(e);  
                                             }  
            run();    
            }  
            public void paint(Graphics g)  
            {  
                        if(ln==1&&x1>100)  
                        {  
                                    g.drawLine(100,200,100,x1-=5);  
                        }  
                        if(ln==2&&x2<150)  
                        {  
                                    g.drawLine(100,200,100,100);  
                                    g.drawLine(100,100,x2+=5,100);  
                        }  
                        if(ln==3&&x3>125&&y3<125)  
                        {  
                                    g.drawLine(100,200,100,100);  
                                    g.drawLine(100,100,150,100);  
                                    g.drawLine(150,100,x3-=5,y3+=5);  
                        }  
                        if(ln==4&&x4<150&&y4<150)  
                        {  
                                    g.drawLine(100,200,100,100);  
                                    g.drawLine(100,100,150,100);  
                                    g.drawLine(150,100,125,125);  
                                    g.drawLine(125,125,x4+=5,y4+=5);  
                        }  
                        if(ln==5&&x5>100)  
                        {  
                                    g.drawLine(100,200,100,100);  
                                    g.drawLine(100,100,150,100);  
                                    g.drawLine(150,100,125,125);  
                                    g.drawLine(125,125,150,150);  
                                    g.drawLine(150,150,x5-=5,150);  
                        }                        
            }  
}

Q12] import java.awt.\*;  
import java.util.\*;  
import java.applet.\*;  
//The basic applet class.The applet shows 4 cars crossing each other at a square.  
class Slip7\_2 extends Applet implements Runnable  
{  
Thread t;  
//4 variables used to vary the car's positions.  
int x1=0,x2=380,y1=50,y2=250;  
public void start()  
{  
if(t==null)  
{  
t =new Thread(this,"New Thread");//New side Thread created on start  
of applet.  
t.start();  
}  
}  
public void stop()  
{  
if(t!=null)  
{  
t =null;//On stop of applet the created thread is destroyed.  
}  
}  
//Implementation of method run() of Runnable interface.  
public void run()  
{  
Thread t1=Thread.currentThread();  
while(t==t1)  
{  
repaint();  
try  
{  
Thread.sleep(100);  
}  
catch(Exception e)  
{ }  
}  
}  
public void paint(Graphics g)  
{  
setBackground(Color.cyan);  
g.setColor(Color.BLACK);  
x1=(x1+16)%400;  
x2=x2-16;  
y1=(y1+12)%300;  
y2=y2-12;  
if(y2<0)  
y2=288;  
if(x2<0)  
x2=384;  
//Draw the roads using 2 filled rectangles using black color.  
g.fillRect(0,130,400,40);  
g.fillRect(180,0,40,305);  
//Draw the white colored lines.  
g.setColor(Color.white);  
for(int i =0; i <20;i++)  
{  
if(i !=9 &&i !=10)  
g.drawLine(i\*20,150,i\*20+10,150);  
}  
  
for(int j=0;j<15;j++)  
{  
if(j!=7 && j!=8)  
g.drawLine(200,j\*20,200,j\*20+10);  
}  
//Draw 4 colored cars using filled round rectangles.  
g.setColor(Color.red);  
g.fillRoundRect(x2,152,20,8,2,2);  
g.fillRoundRect(x1,140,20,8,2,2);  
g.fillRoundRect(190,y1,8,20,2,2);  
g.fillRoundRect(202,y2,8,20,2,2);  
}  
}

Q13] import java.awt.\*;

import java.awt.event.\*;

public class adprgm13 extends Frame implements Runnable

{

Thread t;

Label l1;

int f;

public adprgm13()

{

t=new Thread(this);

t.start();

setLayout(null);

l1=new Label("hi");

l1.setBounds(100,100,100,40);

add(l1);

setSize(300,300);

setVisible(true);

f=0;

}

public void run()

{

try

{

if(f==0)

{

t.sleep(200);

l1.setText("");

f=1;

}

if(f==1)

{

t.sleep(200);

l1.setText("Hello Java");

f=0;

}

}catch(Exception e)

{

System.out.println(e);

}

run();

}

public static void main(String args[])

{

new adprgm13();

}

}

Q15]

**import** java.awt.\*;

**import** java.awt.event.\*;

**class** MoveText **extends** Frame **implements** Runnable

{

Label **l1**;

Thread **t**;

**int x**,**y**,**side**;

**public** MoveText()

{

setLayout(**null**);

**l1**=**new** Label(**"Sachin "**);

**l1**.setFont(**new** Font(**""**,Font.BOLD,14));

**l1**.setForeground(Color.red);

setSize(400,400);

setVisible(**true**);

**t**=**new** Thread(**this**);

**t**.start();

**x**=5;

**y**=200;**side**=1;

addWindowListener(**new** WindowAdapter()

{

**public void** windowClosing(WindowEvent we)

{

System.*exit*(0);

}

});

}

**public void** run()

{

**try** {

**if**(**side**==1)

{

**t**.*sleep*(50);

**l1**.setBounds(**x**+=5,**y**-=5,70,15);

add(**l1**);

26 **if**(**y**==20)

**side**=2;

}

**if**(**side**==2)

{

**t**.*sleep*(50);

**l1**.setBounds(**x**+=5,**y**+=5,70,15);

add(**l1**);

**if**(**y**==200)

**side**=3;

}

**if**(**side**==3)

{

**t**.*sleep*(50);

**l1**.setBounds(**x**-=5,**y**+=5,70,15);

add(**l1**);

**if**(**y**==390)

**side**=4;

}

**if**(**side**==4)

{

**t**.*sleep*(50);

**l1**.setBounds(**x**-=5,**y**-=5,70,15);

add(**l1**);

**if**(**x**==0)

{

**side**=1;

**x**=0;**y**=200;

}

}

}**catch**(Exception e)

{

System.***out***.println(e);

}

run();

}

**public static void** main(String args[])

{

**new** MoveText();

}

Q16]

import java.awt.\*;  
/\*<applet code="BounsingBall.class" height=400 width=350></applet>\*/  
public class BounsingBall extends java.applet.Applet implements Runnable  
{  
    Thread t;  
    int f,y,f1,f2,f3;  
    public void init()  
    {          
             t=new Thread(this);  
             t.start();  
            f=0;  y=0;  f1=0;            
    }  
    public void run()  
    {   try{          
            if (f==0){      t.sleep(10);  
                                 y=y+5;  
                                 repaint();  
                                 if(f1==6)  
                                f1=0;  
                           }  
            if(f==1) {   t.sleep(10);  
                               y=y-5;  
                              repaint();  
                             if(f1==6)  
                              f1=0;  
                          }  
            }catch(Exception e){ }  
            run();    
    }  
    public void paint(Graphics g)  
    {  
        if(f==0) {  
                         if(f1==1)  
                        g.setColor(Color.green);  
                        if(f1==2)  
                        g.setColor(Color.blue);  
                        if(f1==3)  
                        g.setColor(Color.red);  
                        if(f1==4)  
                        g.setColor(Color.yellow);  
                        if(f1==5)  
                        g.setColor(Color.orange);  
                        g.fillOval(150,y+10,20,20);  
                        if(y==400)  
                         {          
                                 f1++;  f=1;        
                           }                    
                   }  
        if(f==1) {  
                         if(f1==1)  
                        g.setColor(Color.green);  
                        if(f1==2)  
                        g.setColor(Color.blue);  
                         if(f1==3)  
                         g.setColor(Color.red);  
                        if(f1==4)  
                        g.setColor(Color.yellow);  
                       if(f1==5)  
                       g.setColor(Color.orange);  
                       g.fillOval(150,y-10,20,20);  
                        if(y==0)  
                         {            
                                 f1++; f=0;            
                          }  
                   }  
      }  
}

Q18]

import java.awt.\*;

import java.awt.event.\*;

public class adprgm18 extends Frame implements ActionListener, Runnable

{

Button b1,b2;

TextField t11,t12;

int cnt;

Thread t1= new Thread(this,"t1");

Thread t2= new Thread(this,"t2");

public adprgm18()

{

setLayout(null);

t11=new TextField();

t12=new TextField();

b1=new Button("Start");

b2=new Button("Stop");

t11.setBounds(50,50,100,100);

t12.setBounds(160,50,100,100);

b1.setBounds(50,170,100,30);

b2.setBounds(160,170,100,30);

add(t11);

add(t12);

b1.addActionListener(this);

b2.addActionListener(this);

add(b1);

add(b2);

setSize(400,400);

setVisible(true);

cnt=0;

addWindowListener(new WindowAdapter()

{

public void windowclosing(WindowEvent e)

{

System.exit(0);

}

});

}

public void actionPerformed(ActionEvent ae)

{

String str;

str=ae.getActionCommand();

if(str.equals("Start"))

{

t1.start();

t2.start();

}

else if(str.equals("Stop"))

{

t1.stop();

t2.stop();

}

}

public void run()

{

try

{

for(int i=1;i<=100;i++)

{

t11.setText(""+i);

t1.sleep(150);

t12.setText(""+i);

t2.sleep(150);

}

}

catch(Exception e){}

}

public static void main(String args[])

{

new adprgm18().show();

}

}

Q24]

class MyThread extends Thread

{

public MyThread(String s)

{

super(s);

}

public void run()

{

System.out.println(getName()+"thread created");

while(true)

{

System.out.println(this);

int s=(int)(Math.random()\*5000);

System.out.println(getName()+"is sleeping for"+s+"msec");

try

{

Thread.sleep(s);

}

catch(Exception e)

{

}

}

}

}

class adprgm24

{

public static void main(String args[])

{

MyThread t1=new MyThread("sanjana"),t2=new MyThread("tushar");

t1.start();

t2.start();

try

{

t1.join();

t2.join();

}

catch(Exception e)

{

}

System.out.println(t1.getName()+"thread dead");

System.out.println(t2.getName()+"thread dead");

}

}

/\*

C:\javaprograms\sem6>javac adprgm24.java

C:\javaprograms\sem6>java adprgm24

sanjanathread created

Thread[sanjana,5,main]

tusharthread created

Thread[tushar,5,main]

sanjanais sleeping for273msec

tusharis sleeping for3582msec

Thread[sanjana,5,main]

sanjanais sleeping for3189msec

Thread[sanjana,5,main]

sanjanais sleeping for3185msec

Thread[tushar,5,main]

tusharis sleeping for799msec

Thread[tushar,5,main]

tusharis sleeping for3713msec

Thread[sanjana,5,main]

sanjanais sleeping for4484msec

Thread[tushar,5,main]

tusharis sleeping for3477msec

Thread[sanjana,5,main]

sanjanais sleeping for3802msec

Thread[tushar,5,main]

tusharis sleeping for1918msec

Thread[tushar,5,main]

tusharis sleeping for4516msec

Thread[sanjana,5,main]

sanjanais sleeping for1775msec

Thread[yogita,5,main]

sanjanais sleeping for215msec

Thread[sanjana,5,main]

sanjanais sleeping for1438msec

Thread[tushar,5,main]

tusharis sleeping for817msec

Thread[sanjana,5,main]

sanjanais sleeping for3564msec

Thread[tushar,5,main]

tusharis sleeping for3859msec

Thread[sanjana,5,main]

sanjanais sleeping for1270msec

Thread[tushar,5,main]

tusharis sleeping for4947msec

Thread[sanjana,5,main]

sanjanais sleeping for605msec

Thread[sanjana,5,main]

sanjanais sleeping for2876msec

Thread[sanjana,5,main]

sanjanais sleeping for3906msec

Thread[tushar,5,main]

tusharis sleeping for2644msec

Thread[tushar,5,main]

tusharis sleeping for1478msec

Thread[sanjana,5,main]

sanjanais sleeping for618msec

Thread[sanjana,5,main]

sanjanais sleeping for456msec

Thread[sanjana,5,main]

sanjanais sleeping for1687msec

Thread[tushar,5,main]

tusharis sleeping for680msec

Thread[tushar,5,main]

tusharis sleeping for2131msec

Thread[sanjana,5,main]

sanjanais sleeping for4804msec

Thread[tushar,5,main]

tusharis sleeping for1649msec

Thread[tushar,5,main]

tusharis sleeping for2317msec

Thread[sanjana,5,main]

sanjanais sleeping for1309msec

Thread[tushar,5,main]

tusharis sleeping for1604msec

Thread[sanjana,5,main]

sanjanais sleeping for4963msec

Thread[tushar,5,main]

tusharis sleeping for2022msec

Thread[tushar,5,main]

tusharis sleeping for1581msec

Thread[tushar,5,main]

tusharis sleeping for1261msec

Thread[sanjana,5,main]

sanjanais sleeping for353msec

Thread[sanjana,5,main]

sanjanais sleeping for1018msec

Thread[tushar,5,main]

tusharis sleeping for4738msec

Thread[sanjana,5,main]

sanjanais sleeping for3507msec

Thread[sanjana,5,main]

sanjanais sleeping for2764msec

Thread[tushar,5,main]

tusharis sleeping for4196msec

Thread[sanjana,5,main]

sanjanais sleeping for3140msec

Thread[tushar,5,main]

tusharis sleeping for4836msec

Thread[sanjana,5,main]

sanjanais sleeping for3337msec

Thread[sanjana,5,main]

sanjanais sleeping for4631msec

Thread[tushar,5,main]

tusharis sleeping for46msec

Thread[tushar,5,main]

tusharis sleeping for3840msec

Thread[tushar,5,main]

tusharis sleeping for3899msec

Thread[sanjana,5,main]

sanjanais sleeping for255msec

Thread[sanjana,5,main]

sanjanais sleeping for1308msec

Thread[sanjana,5,main]

sanjanais sleeping for2456msec

Thread[tushar,5,main]

tusharis sleeping for2643msec

Thread[sanjana,5,main]

sanjanais sleeping for4268msec

Thread[tushar,5,main]

tusharis sleeping for3956msec

Thread[sanjana,5,main]

sanjanais sleeping for228msec

Thread[sanjana,5,main]

sanjanais sleeping for1411msec

Thread[sanjana,5,main]

sanjanais sleeping for4440msec

Thread[tushar,5,main]

tusharis sleeping for3512msec

Thread[tushar,5,main]

tusharis sleeping for2946msec

Thread[sanjana,5,main]

sanjanais sleeping for27msec

Thread[sanjana,5,main]

sanjanais sleeping for2698msec

Thread[tushar,5,main]

tusharis sleeping for1988msec

Thread[sanjana,5,main]

sanjanais sleeping for1462msec

Thread[tushar,5,main]

tusharis sleeping for4653msec

Thread[sanjana,5,main]

sanjanais sleeping for210msec

Thread[sanjana,5,main]

sanjanais sleeping for2625msec

Thread[sanjana,5,main]

sanjanais sleeping for1043msec

Thread[sanjana,5,main]

sanjanais sleeping for2msec

Thread[sanjana,5,main]

sanjanais sleeping for4774msec

Thread[tushar,5,main]

tusharis sleeping for378msec

Thread[tushar,5,main]

tusharis sleeping for1354msec

Thread[tushar,5,main]

tusharis sleeping for4584msec

Thread[sanjana,5,main]

sanjanais sleeping for1441msec

Thread[sanjana,5,main]

sanjanais sleeping for4040msec

Thread[tushar,5,main]

tusharis sleeping for2053msec

Thread[tushar,5,main]

tusharis sleeping for3828msec

Thread[sanjana,5,main]

sanjanais sleeping for4177msec

Thread[tushar,5,main]

tusharis sleeping for1702msec

Thread[sanjana,5,main]

sanjanais sleeping for4032msec

Thread[tushar,5,main]

tusharis sleeping for3069msec

Thread[tushar,5,main]

tusharis sleeping for877msec

Thread[sanjana,5,main]

sanjanais sleeping for896msec

Thread[tushar,5,main]

tusharis sleeping for1524msec

Thread[sanjana,5,main]

sanjanais sleeping for892msec

Thread[tushar,5,main]

tusharis sleeping for1152msec

Thread[sanjana,5,main]

sanjanais sleeping for3426msec

Thread[tushar,5,main]

tusharis sleeping for663msec

Thread[tushar,5,main]

tusharis sleeping for3253msec

Thread[tushar,5,main]

tusharis sleeping for595msec

\*/

Q25]

change name of thread to MyThread and priority to 2. Display the details of Thread.

public class adprgm25

{

public static void main(String args[])

{

Thread t=Thread.currentThread();

System.out.println("Current thread:"+t);

t.setName("My thread "+t);

System.out.println("After the name is changed: "+t);

try

{

for(int i=2;i>0;i--)

{

System.out.println(i);

Thread.sleep(100);

}

}

catch(Exception e)

{

System.out.println(e);

}

}

}

/\*

C:\javaprograms\sem6>javac adprgm25.java

C:\javaprograms\sem6>java adprgm25

Current thread:Thread[main,5,main]

After the name is changed: Thread[My thread Thread[main,5,main],5,main]

5

4

3

2

1

C:\javaprograms\sem6>

\*/

Q26]

wap using multithreading to execute the threads sequentially. use synchronized method.

class multiT extends Thread

{

multiT1 t;

String name;

public multiT(String s, multiT1 t1)

{

name=s;

start();

t=new multiT1();

t1=t;

}

public void run()

{

t.Display(name);

}

}

class multiT1

{

synchronized void Display(String name1)

{

try

{

for(int i=1; i<=5; i++)

{

System.out.println(name1+" "+i);

}

}catch(Exception e)

{}

}

}

public class adprgm26

{

public static void main(String[] args)

{

multiT1 td=new multiT1();

multiT d=new multiT("FIRST",td);

multiT d1=new multiT("SECOND",td);

multiT d2=new multiT("THIRD",td);

}

}

/\*

C:\javaprograms\sem6>javac adprgm26.java

C:\javaprograms\sem6>java adprgm26

SECOND 1

SECOND 2

SECOND 3

SECOND 4

FIRST 1

THIRD 1

THIRD 2

THIRD 3

FIRST 2

SECOND 5

FIRST 3

THIRD 4

THIRD 5

FIRST 4

FIRST 5

C:\javaprograms\sem6>

\*/

Q29]

**import** java.awt.\*;

**import** java.applet.\*;

**public class** smileface **extends** Applet **implements** Runnable

{

**int aflag**;

Thread **t**;

**public void** init() {

**t**=**new** Thread(**this**); **aflag**=0;

**t**.start();

}

**public void** run()

{

**try** {

**if** (**aflag**==0)

{

**t**.*sleep*(1000);

**aflag**=1;

} **else** {

**t**.*sleep*(1000);

**aflag**=0;

}

repaint();

run();

}

**catch**(Exception e)

{

}

}

**public void** paint(Graphics g) {

34 g.drawOval(100,100,100,100);

g.fillOval(120,125,20,20);

g.fillOval(160,125,20,20);

g.drawLine(150,135,150,165);

**if** (**aflag**==0)

{ g.drawArc(140,160,20,20,0,-180);

**aflag**=1;

}

**else** {

g.drawArc(140,160,20,20,0,180);

**aflag**=0;

}

}

}

Q39]

public class LightThread {

public static void main(String[] args) {

Thread t1 = new Thread(new MyLight(),"t1");

t1.start();

}

}

public class MyLight extends Runnable {

public void run() {

while(true) {

System.out.println("Light: Yellow");

Thread.sleep(2000);

System.out.println("Light: Red");

Thread.sleep(2000);

System.out.println("Light: Green");

Thread.sleep(2000);

}

}

}

Q40]

public class adprgm40 extends Thread

{

char c;

public void run()

{

for(c='A';c<='Z';c++)

{

System.out.println(""+c);

try

{

Thread.sleep(3000);

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

public static void main(String args[])

{

adprgm40 t=new adprgm40();

t.start();

}

}

/\*

C:\javaprograms\sem6>java adprgm40

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

C:\javaprograms\sem6>

\*/

Q43]

import java.awt.\*;

import java.awt.event.\*;

import java.util.\*;

public class adprgm43 extends Frame implements ActionListener,Runnable

{

Button start,stop;

TextField tf;

int x=0,y=0;

String msg="";

Thread t1=new Thread(this);

public adprgm43()

{

setLayout(new FlowLayout());

start=new Button("start");

stop=new Button("stop");

add(start);

add(stop);

start.addActionListener(this);

stop.addActionListener(this);

addWindowListener(new WindowAdapter()

{

public void windowClosing(WindowEvent e)

{

System.exit(0);

}

});

setSize(200,200);

setVisible(true);

}

public void actionPerformed(ActionEvent ae)

{

Button btn=(Button) ae.getSource();

if(btn==start)

{

t1.start();

}

if(btn==stop)

{

t1.stop();

}

}

public void run()

{

try

{

while(true)

{

repaint();

Thread.sleep(350);

}

}

catch(Exception e)

{

}

}

public void paint(Graphics g)

{

int sec,min,hr;

GregorianCalendar date=new GregorianCalendar();

sec=date.get(Calendar.SECOND);

min=date.get(Calendar.MINUTE);

hr=date.get(Calendar.HOUR);

msg=hr+":"+min+":"+sec;

g.drawString(msg,10,y+=10);

}

public static void main(String args[])

{

new adprgm43();

}

}

Q47]

import java.awt.Graphics;

import java.awt.Color;

import java.awt.Font;

public class ColorSwirl extends java.applet.Applet

implements Runnable {

Font f = new Font("TimesRoman",Font.BOLD,48);

Color colors[] = new Color[50];

Thread runThread;

public void start() {

if (runThread == null) {

runThread = new Thread(this);

runThread.start();

}

}

public void stop() {

if (runThread != null) {

runThread.stop();

runThread = null;

}

}

public void run() {

// initialize the color array

float c = 0;

for (int i = 0; i < colors.length; i++) {

colors[i] =

Color.getHSBColor(c, (float)1.0,(float)1.0);

c += .02;

}

// cycle through the colors

int i = 0;

while (true) {

setForeground(colors[i]);

repaint();

i++;

try { Thread.sleep(50); }

catch (InterruptedException e) { }

if (i == colors.length ) i = 0;

}

}

public void paint(Graphics g) {

g.setFont(f);

g.drawString("All the Swirly Colors", 15, 50);51: }

}

]