SE CMPN A Roll no:30

/\*Program to implement DDA Circle drawing algorithm \*/

import java.util.\*;

import java.applet.Applet;

import java.awt.\*;

/\*<applet code="DDACircle1.class" width=400 height=400>

</applet>\*/

public class DDACircle1 extends Applet

{

double x2,y2,x1,y1,stx,sty;

double e;

int n;

public void draw(double r,Graphics g)

{

stx=0;

sty=r;

x1=stx;

y1=sty;

n=0;

do

{

n++;

}

while(Math.pow(2,(n-1))>r||Math.pow(2,(n))<r);

e=Math.pow(2,(-n));

do

{

x2=x1+(e\*y1);

y2=y1-(e\*x2);

g.drawLine((int)x2+150,(int)y2+150,(int)x2+150,(int)y2+150);

g.drawLine((int)-x2+150,(int)y2+150,(int)-x2+150,(int)y2+150);

g.drawLine((int)x2+150,(int)-y2+150,(int)x2+150,(int)-y2+150);

g.drawLine((int)-x2+150,(int)-y2+150,(int)-x2+150,(int)-y2+150);

x1=x2;

y1=y2;

}

while((y1-sty)<e||(stx-x1)>e);

}

public void paint(Graphics g)

{

draw(100.0,g);

}

}

/\*

OUTPUT:-

D:\Flevia 30>javac DDACircle1.java

D:\Flevia 30>appletviewer DDACircle1.java

