import java.awt.\*;

import java.applet.\*;

import java.util.\*;

/\*

<applet code="Bezeir1.class" width=500 height=500>

</applet>

\*/

public class Bezeir1 extends Applet

{

Scanner in = new Scanner(System.in);

double ctrl[][]=new double[8][2];

int r=1;

public void init()

{

for(int i=0;i<8;i++)

{

System.out.println("Enter the (x,y) co-ordinates of point "+(i+1));

ctrl[i][0]=in.nextDouble();

ctrl[i][1]=in.nextDouble();

}

}

public void paint(Graphics g)

{ do

{

for(int i=180;i<=300;)

{

bezeir(ctrl[1][0],ctrl[1][1],ctrl[2][0],ctrl[2][1],ctrl[3][0],ctrl[3][1],ctrl[4][0],ctrl[4][1],ctrl[5][0],ctrl[5][1],ctrl[6][0],ctrl[6][1],14,g);

i+=20;

}

r++;

}while(r==3);

}

public void bezeir(double xb,double yb,double xc,double yc,double xd,double yd,double xe,double ye,double xf,double yf,double xg,double yg,int n,Graphics g)

{

double xab,yab,xbc,ybc, xcd,ycd,xde,yde,xef,yef,xfg,yfg;

double xabc,yabc,xbcd,ybcd,xcde,ycde,xdef,ydef,xefg,yefg;

double xabcd,yabcd,xbcde,ybcde,xcdef,ycdef,xdefg,ydefg;

double xabcde,yabcde,xbcdef,ybcdef,xcdefg,ycdefg;

double xabcdef,yabcdef,xbcdefg,ybcdefg;

double xabcdefg,yabcdefg;

if(n==0)

{

line1(xb,yb,g);

line1(xc,yc,g);

line1(xd,yd,g);

line1(xe,ye,g);

line1(xf,yf,g);

line1(xg,yg,g);

}

else

{

xab = (ctrl[0][0] + xb)/2;

yab = (ctrl[0][1] + yb)/2;

xbc = (xb+xc)/2;

ybc = (yb+yc)/2;

xcd = (xc+xd)/2;

ycd = (yc+yd)/2;

xde = (xd+xe)/2;

yde = (yd+ye)/2;

xef = (xe+xf)/2;

yef = (ye+yf)/2;

xfg = (xf+xg)/2;

yfg = (yf+yg)/2;

xabc = (xab+xbc)/2;

yabc = (yab+ybc)/2;

xbcd = (xbc+xcd)/2;

ybcd = (ybc+ycd)/2;

xcde = (xcd+xde)/2;

ycde = (ycd+yde)/2;

xdef = (xde+xef)/2;

ydef = (yde+yef)/2;

xefg = (xef+xfg)/2;

yefg = (yef+yfg)/2;

xabcd= (xabc+xbcd)/2;

yabcd= (yabc+ybcd)/2;

xbcde = (xbcd+xcde)/2;

ybcde = (ybcd+ycde)/2;

xcdef = (xcde+xdef)/2;

ycdef = (ycde+ydef)/2;

xdefg = (xdef+xefg)/2;

ydefg= (ydef+yefg)/2;

xabcde= (xabcd+xbcde)/2;

yabcde= (yabcd+ybcde)/2;

xbcdef = (xbcde+xcdef)/2;

ybcdef = (ybcde+ycdef)/2;

xcdefg= (xcdef+xdefg)/2;

ycdefg = (ycdef+ydefg)/2;

xabcdef= (xabcde+xbcdef)/2;

yabcdef= (yabcde+ybcdef)/2;

xbcdefg = (xbcdef+xcdefg)/2;

ybcdefg = (ybcdef+ycdefg)/2;

xabcdefg= (xabcdef+xbcdefg)/2;

yabcdefg= (yabcdef+ybcdefg)/2;

n=n-1;

bezeir(xab,yab,xabc,yabc,xabcd,yabcd,xabcde,yabcde,xabcdef,yabcdef,xabcdefg,yabcdefg,n,g);

bezeir(xbcdefg,ybcdefg,xcdefg,ycdefg,xdefg,ydefg,xefg,yefg,xfg,yfg,xg,yg,n,g);

}

}

public void line1(double x2,double y2,Graphics g)

{

for(int i=0;i<4;i++)

{

g.drawLine((int)ctrl[0][0]+i,(int)ctrl[0][1]+i,(int)x2+i,(int)y2+i);

ctrl[0][0]=x2;

ctrl[0][1]=y2;

}

}

}

/\*

D:\Flevia 30>javac Bezeir1.java

D:\Flevia 30>appletviewer Bezeir1.java

Enter the (x,y) co-ordinates of point 1

100

200

Enter the (x,y) co-ordinates of point 2

130

100

Enter the (x,y) co-ordinates of point 3

170

100

Enter the (x,y) co-ordinates of point 4

200

200

Enter the (x,y) co-ordinates of point 5

200

200

Enter the (x,y) co-ordinates of point 6

230

100

Enter the (x,y) co-ordinates of point 7

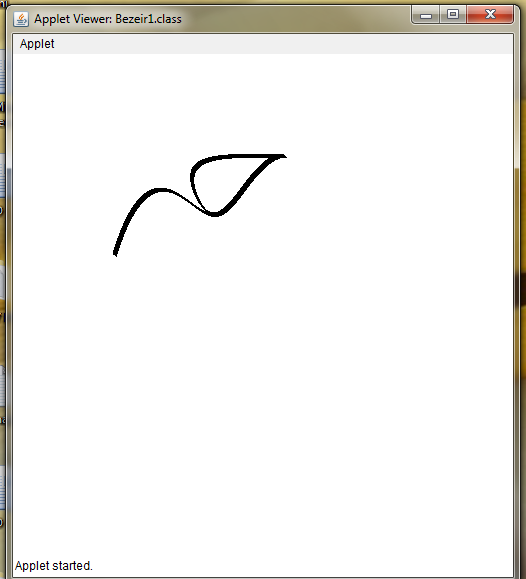
270

100

Enter the (x,y) co-ordinates of point 8

300

200



\*/