#include<stdio.h>

#include<math.h>

#include<graphics.h>

#include<conio.h>

int a;

void drawfern(int x,int y,int l,int arg,int n)

{

int x1,y1,i;

int l1,xpt,ypt;

if(n>0&&!kbhit())

{

x1=(int)(x-l\*sin(arg\*3.14/180));

y1=(int)(y-l\*cos(arg\*3.14/180));

line(x,y,x1,y1);

l1=(int)(l/5);

for(i=1;i<6;i++)

{

xpt=(int)(x-i\*l1\*sin(arg\*3.14/180));

ypt=(int)(y-i\*l1\*cos(arg\*3.14/180));

drawfern(xpt,ypt,(int)(l/(i+1)),arg+a,n-1);

drawfern(xpt,ypt,(int)(l/(i+1)),arg-a,n-1);

}

}

}

void main()

{

int gd=DETECT,gm,x,y,l;

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");

x=getmaxx()/2;

y=getmaxy()/2;

l=150;

a=45;

setcolor(YELLOW);

drawfern(x,y,l,0,5);

getch();

}