

```
#include<stdio.h>

#include<stdlib.h>

#include<conio.h>

#include<math.h>

#include<graphics.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();  
}
```



