

```

#include <iostream>

#include <math.h>

#include <graphics.h>

using namespace std;

class kochCurve
{
public:
void koch(int it,int x1,int y1,int x5,int y5)
{
int x2,y2,x3,y3,x4,y4;

int dx,dy;

if (it==0)
{
line(x1,y1,x5,y5);
}
else
{
delay(10); dx=(x5-x1)/3;

dy=(y5-y1)/3;

x2=x1+dx;

y2=y1+dy;

x3=(int)(0.5*(x1+x5)+sqrt(3)*(y1-y5)/6);

y3=(int)(0.5*(y1+y5)+sqrt(3)*(x5-x1)/6);

x4=2*dx+x1;

y4=2*dy+y1;

koch(it-1,x1,y1,x2,y2);

koch(it-1,x2,y2,x3,y3);

koch(it-1,x3,y3,x4,y4);

koch(it-1,x4,y4,x5,y5);
}
}
}

```

```
};  
  
int main()  
{  
    kochCurve k;  
    int it;  
    cout<<"Enter Number Of Iterations : "<<endl;  
    cin>>it;  
    int gd=DETECT,gm;  
    initgraph(&gd,&gm,NULL);  
    k.koch(it,150,20,20,280);  
    k.koch(it,280,280,150,20);  
    k.koch(it,20,280,280,280);  
    getch();  
    closegraph();  
    return 0;  
}
```