#include<iostream>

#include<graphics.h>

#include<math.h> #include<cstdlib> using namespace std;

void move(int j, int h, int &x,int &y)

{

if(j==1)

y-=h;

else

if(j==2)

x+=h;

else if(j==3)

y+=h;

else if(j==4) x-=h;

lineto(x,y);

}

void hilbert(int r,int d,int l ,int u,int i,int h,int &x,int &y)

{

if(i>0)

{

i--;

hilbert(d,r,u,l,i,h,x,y); move(r,h,x,y);

hilbert(r,d,l,u,i,h,x,y); move(d,h,x,y);

hilbert(r,d,l,u,i,h,x,y); move(l,h,x,y);

hilbert(u,l,d,r,i,h,x,y);

}

} int main()

{

int n,x1,y1;

int x0=50,y0=150,x,y,h=10,r=2,d=3,l=4,u=1; cout<<"Give the value of n=";

cin>>n; x=x0; y=y0;

int driver=DETECT,mode=0; initgraph(&driver,&mode,NULL);

moveto(x,y);

hilbert(r,d,l,u,n,h,x,y); delay(10000); closegraph();

return 0;

}