#include<graphics.h>

#include<iostream>

#include<math.h>

using namespace std;

int main()

{

int gdriver=DETECT,gmode,tmp,n=0,r;

float st\_x,st\_y,x1,x2,y1,y2,ep;

initgraph(&gdriver,&gmode,NULL);

cout<<"Enter Radius: ";

cin>>r;

while(r > pow(2,n))

{

n++;

}

ep = 1 / pow(2,n);

st\_x = 0; st\_y = r;

x1 = st\_x; y1 = st\_y;

do

{

x2 = x1 + (ep \* y1);

y2 = y1 - (ep \* x2);

putpixel(x2+200,y2+200,10);

x1 = x2;

y1 = y2;

}while((y1-st\_y)<ep || (st\_x-x1)>ep);

getch();

return 0;

}