#include<graphics.h>

#include<iostream>

using namespace std;

int main()

{

int x1,y1,x2,y2,dx,dy,length,i=0;

float x,y,xinc,yinc;

int gd=DETECT,gm;

initgraph(&gd,&gm,NULL);

cout<<"Enter the starting coordinates: ";

cin>>x1>>y1;

cout<<"Enter the ending coordinates: ";

cin>>x2>>y2;

dx=x2-x1;

dy=y2-y1;

if(abs(dx)>abs(dy))

length=abs(dx);

else

length=abs(dy);

xinc=dx/(float)length;

yinc=dy/(float)length;

x=x1;

y=y1;

putpixel(x,y,10);

cout<<"i\t"<<"X\t"<<"Y\t"<<endl;

cout<<"--------------------------"<<endl;

cout<<i<<"\t"<<x<<"\t"<<y<<"\t"<<endl;

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

{

x=x+xinc;

y=y+yinc;

putpixel(x,y,10);

cout<<i<<"\t"<<x<<"\t"<<y<<"\t"<<endl;

delay(100);

}

getch();

closegraph();

return 0;

}