/\*dda algorithm made by Rahul Semwal\*/

#include<stdio.h>

/\*stdio(standard input output) library used for printf and scanf\*/

#include<conio.h>

/\*conio(console input output) \*/

#include<dos.h>

/\*is used for dealy fuction\*/

#include<graphics.h>

/\*used for graphic functions\*/

#include<math.h>

/\*used for math functions\*/

void make\_line(int,int,int,int);//make line function prototype

void main() //1st fuction call by os

{

int x1,y1,x2,y2; //simple declaration of line points

clrscr(); //used for clear the screen for next run

printf("enter x1:"); // print to computer screen

scanf("%d",&x1); // get value of x1 from user

printf("\nenter y1:"); //print to computer screen

scanf("%d",&y1); //get value of y1 from user

printf("\nenter x2:"); //print to computer screen

scanf("%d",&x2); //get value of y1 from user

printf("\nenter y2:"); //print to computer screen

scanf("%d",&y2); //get value of y1 from user

make\_line(x1,y1,x2,y2); //function calling,passing starting and ending points as parameter.

printf("success"); //print success if graph prints to computer screen

getch(); //hold the screen until key press

closegraph(); //close the graph after printing

}

void make\_line(int x1,int y1,int x2,int y2)

{ //staring function body of make\_line

int gd,gm,px,py,dy,dx; //simple declaration of line points

int temp,i;

detectgraph(&gd,&gm); //detecting graphic hardware

initgraph(&gd,&gm,""); //initializing graphic driver

dx=abs(x2-x1); //sampling along x

dy=abs(y2-y1); //sampling along y

if(dx>=dy) //compare dx and dy to find exact position

temp=dy; //assigning dy to temp

else //else

temp=dx; //assigning dx to temp

dx=dy/temp; //finding slope along x

dy=dx/temp; //finding slope along y

i=1; //assigning 1 to i

px=x1; //assigning x1 point to px as starting x point

py=y1; //assigning y1 point to py as starting y point

while(i<=temp) //while loop goes to max of temp

{

putpixel(px,py,1); //set the pixel on screen as given point

px=px+dx; //upgrade px by dx slope

py=py+dy; //upgrade py by dy slope

delay(50); //applying delay function

i++; //increment in I and close while loop

}

}