**Aim:** To implement DDA algorithm for drawing segment between two given end points.

**Algorithm:**

DDA Algorithm

{

dx=x2-x1;

dy=y2-y1;

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

{

Step=dx;

}

else

{

step=dy;

}

Xn=dx/step;

Yn=dy/step;

for(int i=0; i<=step; i++))

{

Putpixel (x1,y1,WHITE);

x1=x1+xn;

y1=y1+yn;

}

}

**program**

#include<stdio.h>

#include<math.h>

#include<conio.h>

#include<stdio.h>

#include<graphics.h>

void main()

{

int x1,x2,y1,y2,xn,yn,dx,dy,step,i;

int gd=DETECT, gm;

initgraph(&gd,&gm,"C:\\TURBOC3\\bgi");

printf("enter xi & yi");

scanf("%d %d", &x1, &y1);

printf("Enter x2 & y2");

scanf("%d %d", &x2, &y2);

dx=x2-x1;

dy=y2-y1;

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

{

step=dx;

}

else{

step=dy;

}

xn=dx/step;

yn=dy/step;

for(i=0;i<=step; i++)

{

putpixel(x1,y1, WHITE);

x1=x1+xn;

y1=y1+yn;

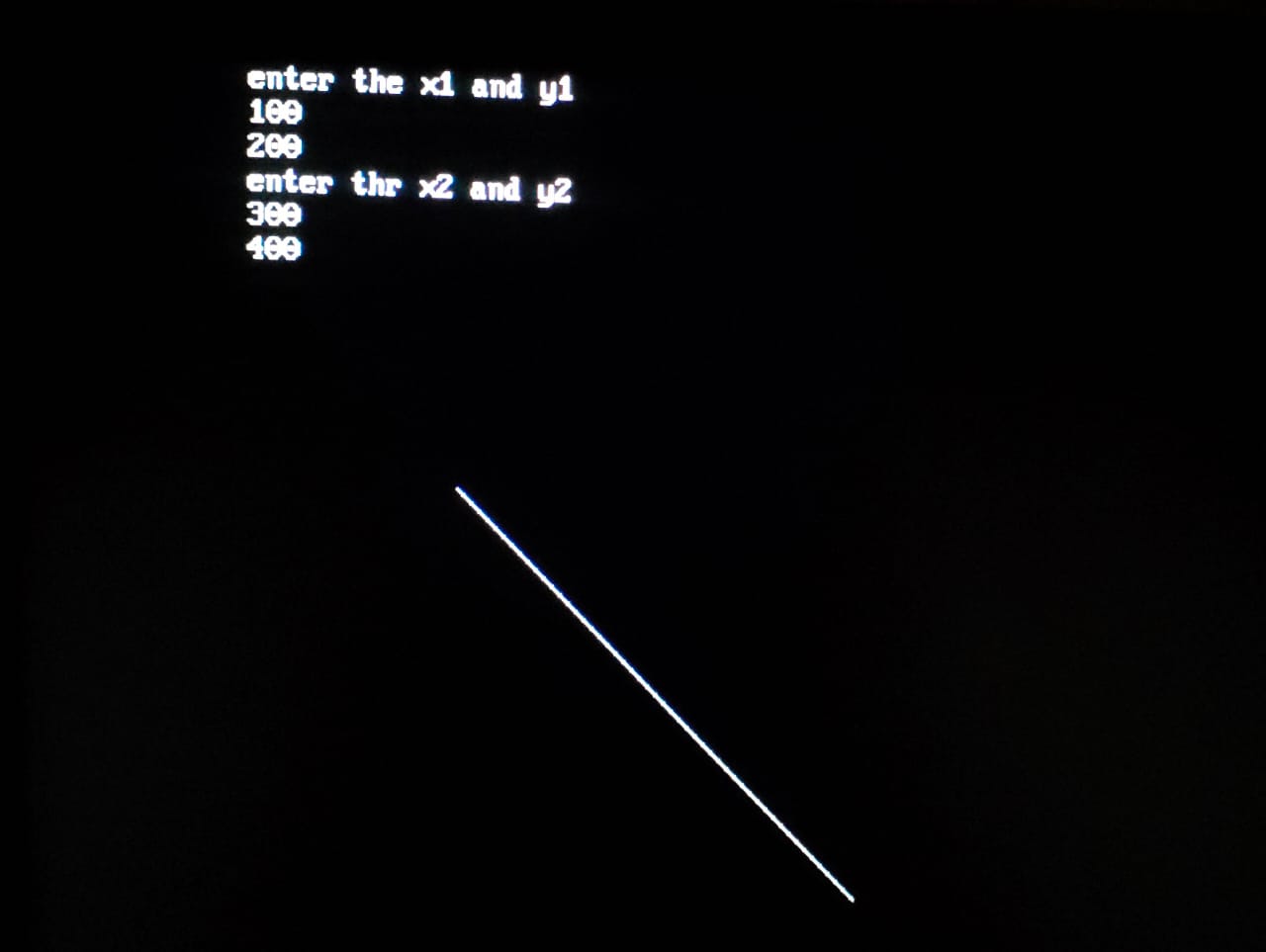
}

getch();

closegraph();

}

**output:**

****