**Bresenham**

**Algorithm :**

**{**

**x= x1;**

**y = y1;**

**dx= x2 – x1;**

**dy = y2 – y1;**

**P = 2\*dy -dx;**

**while(x<=x2)**

**{**

**Putpixel(x,y,color)**

**x++;**

**if(p<0)**

**{**

**p = p + 2dy;**

**}**

**else**

**{**

**y++;**

**p = p + 2dy – 2dx;**

**}**

**}**

**Code :**

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

void main()

{

int x,y,dx,dy,p,x1,x2,y1,y2;

int gd=DETECT , gm;

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

printf("Enter the value for x1 and x2 \n");

scanf("%d %d ",&x1,&x2);

printf("Enter the value for y1 and y2 \n");

scanf("%d %d",&y1,&y2);

dx = x2 - x1;

dy = y2 - y1;

p = 2\*dy - dx;

while(x<=x2)

{

putpixel(x1,y1,GREEN);

x++;

if(p<0)

{

p = p + 2\*dy;

}

else

{

y++;

p = p + 2\*dy - 2\*dx;

}

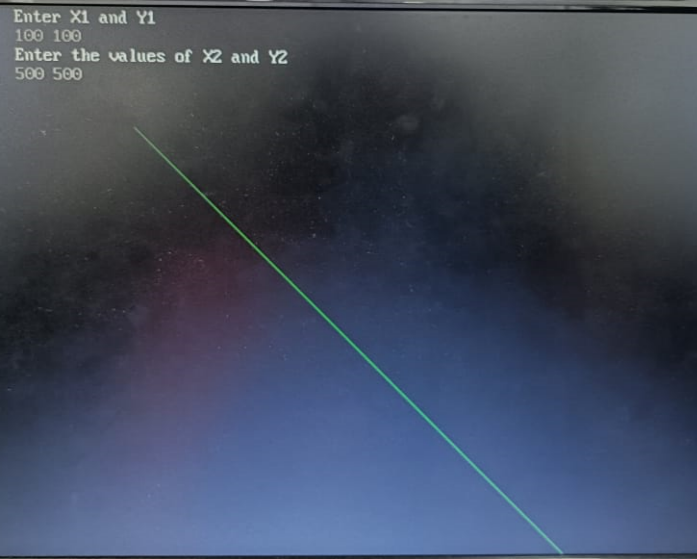
}

getch();

closegraph();

}

**Output :**

****