**Write a program to draw a line using Bresenham’s line generation algorithm.**

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

int main()

{

int gd = DETECT, gm;

int dx, dy, p, end;

float x1, x2, y1, y2, x, y;

initgraph(&gd, &gm, "c:\tc\bgi");

printf("Enter Value of X1: ");

scanf("%f", &x1);

printf("Enter Value of Y1: ");

scanf("%f", &y1);

printf("Enter Value of X2: ");

scanf("%f", &x2);

printf("Enter Value of Y2: ");

scanf("%f", &y2);

dx = abs(x1 - x2);

dy = abs(y1 - y2);

p = 2 \* dy - dx;

if(x1 > x2)

{

x = x2;

y = y2;

end = x1;

}

else

{

x = x1;

y = y1;

end = x2;

}

putpixel(x, y, 10);

while(x < end)

{

x = x + 1;

if(p < 0)

{

p = p + 2 \* dy;

}

else

{

y = y + 1;

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

}

putpixel(x, y, 10);

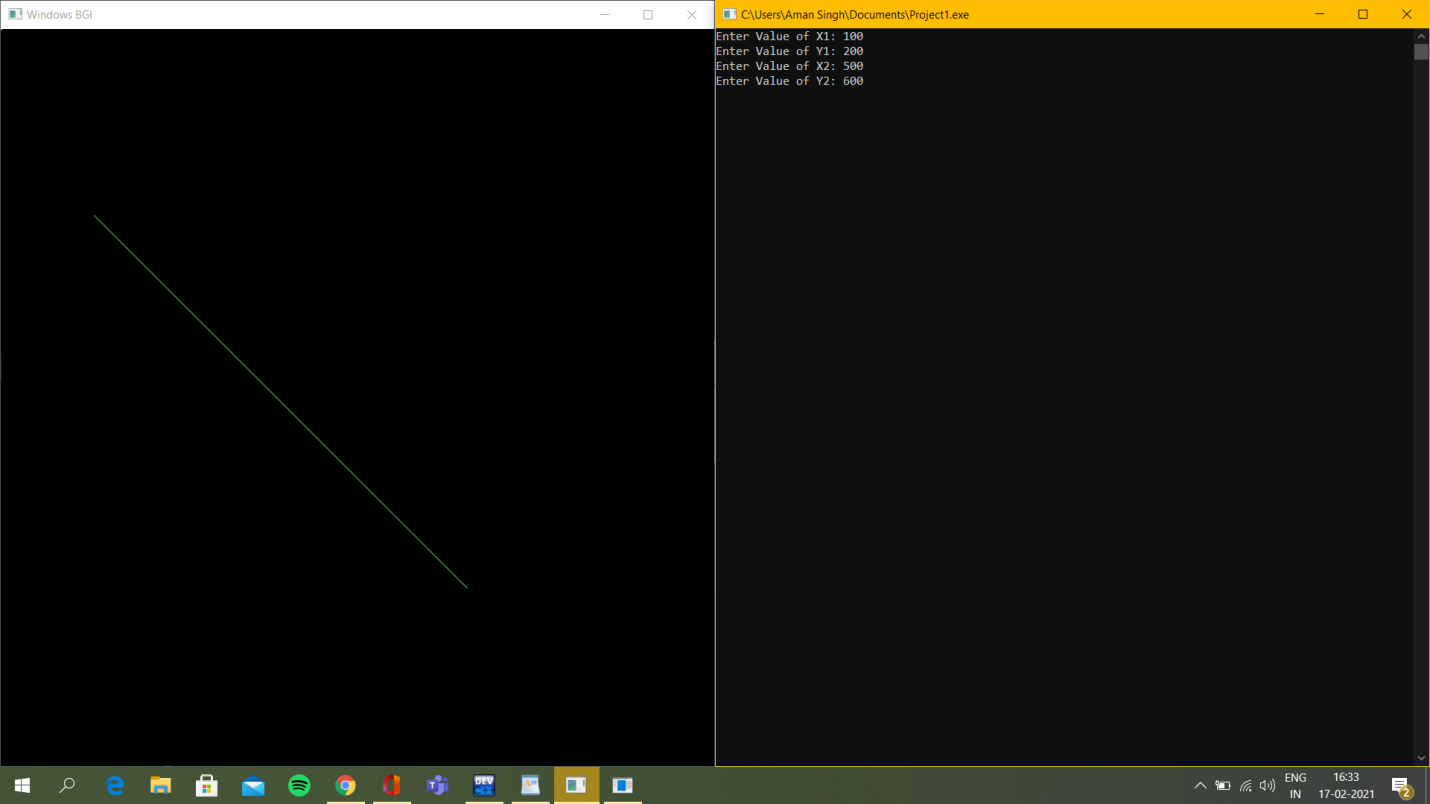
}

getch();

closegraph();

return 0;

}

**Output**