

PROBLEM STATEMENT: Write a program to draw a line using DDA.

Code: -


```
#include <graphics.h>

void main( )
{
    float x,y,x1,y1,x2,y2,dx,dy,steps;
    int i,gd=DETECT,gm;
    printf("Enter (x1, y1) : ");
    scanf("%f%f",&x1,&y1);
    printf("Enter (x2,y2): ");
    scanf("%f%f",&x2,&y2);
    initgraph(&gd,&gm,"");
    dx=abs(x2-x1);
    dy=abs(y2-y1);
    if(dx>=dy)
        steps=dx;
    else
        steps=dy;
    dx=dx/steps;
    dy=dy/steps;
    x=x1;
    y=y1;
    i=1;
    while(i<=steps)
    {

        putpixel(x,y,5);
```

```
        x=x+dx;  
        y=y+dy;  
        i=i+1;  
        delay(50);  
    }  
    delay(5000);  
    closegraph( );  
}
```

OUTPUT

 C:\Users\m\OneDrive\Desktop\Untitled1.exe

```
Enter (x1, y1) : 50 60
```

```
Enter (x2,y2): 20 30
```

