

DDA line drawing algorithm

```
#include<graphics.h>

#include<stdio.h>

#include<math.h>

#include<dos.h>

int main()

{

    float x,y,x1,y1,x2,y2,dx,dy,step;

    int i,gd=DETECT,gm;

    //detectgraph(&gd,&gm);

    initgraph(&gd,&gm,"");

    printf("\nEnter the x-coordinate of the first point:");

    scanf("%f",&x1);

    printf("\nEnter the y-coordinate of the first point:");

    scanf("%f",&y1);

    printf("\nEnter the x-coordinate of the second point:");

    scanf("%f",&x2);

    printf("\nEnter the y-coordinate of the second point:");

    scanf("%f",&y2);

    dx=abs(x2-x1);

    dy=abs(y2-y1);

    if(dx>dy)

    {

        step=dx;

    }
```

```
else
{
    step=dy;
}
dx=dx/step;
dy=dy/step;
x=x1;
y=y1;
i=1;
while(i<=step)
{
    putpixel(x,y,14);
    x=x+dx;
    y=y+dy;
    i=i+1;
    delay(100);
}
getch();
closegraph();
}
```

Enter the x-coordinate of the first point:200

Enter the y-coordinate of the first point:200

Enter the x-coordinate of the second point:400

Enter the y-coordinate of the second point:400

