

```
// Bresenham's Line Drawing
```

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
#include<graphics.h>
```

```
#include<math.h>
```

```
void main()
```

```
{
```

```
    int length,dx,dy,x1,y1,x2,y2,e;
```

```
    float x,y;
```

```
    int gd=DETECT,gm;
```

```
    initgraph(&gd,&gm,"c://Turboc3//BGI");
```

```
    printf("\n enter coordinates of x1,y1,x2,y2");
```

```
    scanf("%d%d%d%d",&x1,&y1,&x2,&y2);
```

```
    dx=x2-x1;
```

```
    dy=y2-y1;
```

```
    e=2*(dy-dx);
```

```
    x=x1;
```

```
    y=y1;
```

```
    while(x<=x2)
```

```
    {
```

```
        if(e<0)
```

```
        {
```

```
            x=x+1;
```

```
            y=y;
```

```
        e=e+2*dy;
    }
    else
    {
        x=x+1;
        y=y+1;
        e=e+2*(dy-dx);
    }
    putpixel(x,y,15);
}
getch();
closegraph();
}
```