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// Bresenham's Line Drawing
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#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;
        }
        else
        {
            x=x+0.5;
            y=y+0.5;
        }
        plot(x,y);
    }
}
```

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