

## Draw a line using Digital Differential Algorithm

```
#include<graphics.h>
#include<iostream.h>
#include<conio.h>
#include<dos.h>
void main()
{
    int gd=DETECT,gm;
    int x,y,x1,y1,xn,yn,dy,dx,m;
    initgraph(&gd,&gm,"c:\\BGI");
    outtextxy(150,10,"Direct Method Algorithm for line   www.Bcanotes.com");
    cout<<endl<<endl;
    cout<<"enter the starting points=";
    cin>>x1>>y1;
    cout<<"enter the ending points=";
    cin>>xn>>yn;
    dy=(yn-y1);
    dx=(xn-x1);
    m=dy/dx;
    x=x1;
    y=y1;
    dx=1;
```

```
dy=1;
while((x<xn) || (y<=yn))
{
    if(m<1)
    {
        x=x+dx;
        y=(y1+m);
        putpixel(x,y,GREEN);
    }
    if(m>1)
    {
        y=y+dy;
        x=(x/(1/m));
        putpixel(x,y,WHITE);
    }
}
getch();
closegraph();
}
```