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***** Program to Draw a Line using DDA Algorithm *****

#include <stdio.h>
#include <dos.h>
#include <graphics.h>

void lineDDA(int, int, int, int);

void main()
{
    int x1, y1, xn, yn;

    int gd = DETECT, gm;
    initgraph(&gd, &gm, "");

    printf("Enter the starting coordinates of line: ");
    scanf("%d %d", &x1, &y1);
    printf("Enter the ending coordinates of line: ");
    scanf("%d %d", &xn, &yn);

    lineDDA(x1, y1, xn, yn);

    getch();
}

void lineDDA(int x1, int y1, int xn, int yn)
{
    int dx, dy, m, i;
    m = (yn-y1)/(xn-x1);

    for (i=x1; i<=xn; i++)
    {
        if (m <= 1)
        {
            dx = 1;
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    dy = m * dx;  
}  
else  
{  
    dy = 1;  
    dx = dy / m;  
}  
  
x1 = x1 + dx;  
y1 = y1 + dy;  
  
putpixel(x1, y1, RED);  
delay(20);  
}  
}
```