

**Computer Graphics**

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**Experiment No.4 : Write a program to draw a straight line using DDA algorithm.**

#include<graphics.h>

#include<conio.h>

#include<stdio.h>

main()

{

int gd = DETECT ,gm, i;

float x, y,dx,dy,steps;

int x0, x1, y0, y1;

initgraph(&gd, &gm, "C:\\TC\\BGI");

setbkcolor(WHITE);

x0 = 100 , y0 = 200, x1 = 500, y1 = 300;

dx = (float)(x1 - x0);

dy = (float)(y1 - y0);

if(dx>=dy)

{

steps = dx;

}

else

{

steps = dy;

}

dx = dx/steps;

dy = dy/steps;

x = x0;

y = y0;

i = 1;

while(i<= steps)

{

putpixel(x, y, RED);

x += dx;

y += dy;

i=i+1;

}

getch();

closegraph();

}



