**Program 2 : Write a program to implement DDA line drawing algorithm**

#include <graphics.h>

#include <stdio.h>

#include <stdlib.h>

#include <conio.h>

#include <iostream>

using namespace std;

int main()

{

    int gd = DETECT, gm;

    int x1, y1, x2, y2, dx, dy, steps, k;

    float x, y, xinc, yinc;

    initgraph(&gd, &gm, "C:\\MinGW\\lib\\libbgi.a");

    cout << "Enter the value of x1 and y1: ";

    cin >> x1 >> y1;

    cout << "Enter the value of x2 and y2: ";

    cin >> x2 >> y2;

    dx = x2 - x1;

    dy = y2 - y1;

    if (abs(dx) > abs(dy))

    {

        steps = abs(dx);

    }

    else

    {

        steps = abs(dy);

    }

    xinc = dx / (float)steps;

    yinc = dy / (float)steps;

    x = x1;

    y = y1;

    putpixel(x, y, 15);

    for (k = 0; k < steps; k++)

    {

        x += xinc;

        y += yinc;

        putpixel(x, y, GREEN);

        delay(100);

    }

    getch();

    closegraph();

    return 0;

}



