Write a program to Generate a Line Using DDA Algorithm

```cpp
#include <graphics.h>
#include <iostream>
#include <math.h>
#include <dos.h>
using namespace std;
int main()
{
    float x, y, x1, y1, x2, y2, dx, dy, n;
    int i, gd = DETECT, gm;
    initgraph(&gd, &gm, "C:\\TC\\BGI");
    outtextxy(20,20,"Mohit Tiwari");
    outtextxy(40,40,"1915051");
    cout << "Enter the value of x1 and y1 : ";
    cin >> x1 >> y1;
    cout << "Enter the value of x2 and y2: ";
    cin >> x2 >> y2;
    dx = abs(x2 - x1);
    dy = abs(y2 - y1);
    if (dx >= dy)
        n = dx;
    else
        n = dy;
    dx = dx / n;
    dy = dy / n;
    x = x1;
    y = y1;
```

```
i = 1;
while (i <= n)
{
    putpixel(x, y, WHITE);
    x = x + dx;
    y = y + dy;
    i = i + 1;
    delay(100);
}
getch();
closegraph();
}
```

Output-: