

```
1  #include<graphics.h>
2  #include<stdio.h>
3  #include<iostream>
4  #include<conio.h>
5
6  int main()
7  {
8      FILE *fp = fopen("Line_points.txt", "a");
9      initwindow(800,800,"Line Generating Program");
10
11     int x0 = 112, y0 = 14, x1 = 456, y1 = 789;
12
13     int dx, dy, p, x, y;
14
15     dx=x1-x0;
16     dy=y1-y0;
17
18     x=x0;
19     y=y0;
20
21     p=2*dy-dx;
22
23     while(x<x1)
24     {
25         if(p>=0)
26         {
27             putpixel(x,y,GREEN);
28             fprintf(fp, "%d %d\n",x,y);
29             y=y+1;
30             p=p+2*dy-2*dx;
31         }
32         else
33         {
34             putpixel(x,y,GREEN);
35             fprintf(fp, "%d %d\n",x,y);
36             p=p+2*dy;
37         }
38         x=x+1;
39     }
40     getch();
41     return 0;
42 }
```