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1  #include<iostream>
2  #include<conio.h>
3  #include<graphics.h>
4  #include<math.h>
5  using namespace std;
6  void put_pixel(int x, int y, int col)
7  {
8      putpixel(x+320, 240-y, col);
9  }
10 int round(float x)
11 {
12     double rem = fmod((double)x,1.0);
13     if(x<0.5)
14         return (floor((double)x));
15     else
16         return (ceil((double)x));
17 }
18 void dda(int x1, int y1, int x2, int y2)
19 {
20     int xa,ya,xb,yb;
21     setcolor(RED);
22     line(320,0,320,480);
23     setcolor(BLUE);
24     line(0,240,640,240);
25     setcolor(WHITE);
26     if(x1<x2)
27     { xa=x1; ya=y1; xb=x2; yb=y2; }
28     else
29     {
30         xa=x2;
31         ya=y2;
32         xb=x1;
33         yb=y1;
34     }
35     int dx,dy;
36     dx=xb-xa;
37     dy=yb-ya;
38     int steps;
39     float x=xa,y=ya;
40     if (abs(dx)>abs(dy))
41         steps = abs(dx);
42     else
43         steps = abs(dy);
44     float xinc,yinc;
45     xinc = 1.0*dx/steps;
46     yinc = 1.0*dy/steps;
47     put_pixel(xa,ya,15);
48     while(x<xb)
49     {
50         x+=xinc;
51         y+=yinc;
52         put_pixel(round(x),round(y),15);
53     }
54 }
55 int main()
56 {
57     int x1,y1,x2,y2;
58     cout<<"Enter x1,y1 : ";
59     cin>>x1>>y1;
60     cout<<"Enter x2,y2 : ";
61     cin>>x2>>y2;
62     int gd = DETECT, gm;
63     initgraph(&gd,&gm,NULL);
64     dda(x1,y1,x2,y2);
65     getch();
66     closegraph();
67 }
68

```