```cpp
1    #include<iostream>
2    #include<conio.h>
3    #include<graphics.h>
4    using namespace std;
5    void put_pixel(int x, int y, int col)
6    {
7        putpixel(x+320, 240-y, col);
8    }
9    void brsnhm_line(int x1, int y1, int x2, int y2)
10   {
11       setcolor(RED);
12       line(320,0,320,480);
13       setcolor(BLUE);
14       line(0,240,640,240);
15       setcolor(WHITE);
16       int xa, ya,xb,yb;
17       if(x1<x2)
18       {
19           xa=x1;
20           ya=y1;
21           xb=x2;
22           yb=y2;
23       }
24       else
25       {
26           xa=x2;
27           ya=y2;
28           xb=x1;
29           yb=y1;
30       }
31       int dx,dy;
32       dx=xb-xa;
33       dy=yb-ya;
34       int d;
35       float x=xa, y=ya;
36       put_pixel(xa,ya,15);
37       float m = 1.0*dy/dx;
38       if(m>=0 && m<=1)
39       {
40           d=2*dy-dx;
41           while(x<xb)
42           {
43               if(d<0)
44               {
45                   d+=2*dy;
46                   x++;
47               }
48               else
49               {
50                   d+=2*(dy-dx);
51                   x++;
52                   y++;
53               }
54               put_pixel(x,y,15);
55           }
56       }
57       else if(m>1)
58       {
59           d=2*dx-dy;
60           while(x<xb)
61           {
62               if(d<0)
63               {
64                   d+=2*dx;
65                   y++;
66               }
67               else
68               {
69                   d+=2*(dx-dy);
70                   x++;
71                   y++;
72               }
73               put_pixel(x,y,15);
74           }
75       }
76       else if(m>=-1 && m<0)
77       {
78           d=-2*dy-dx;
79           while(x<xb)
80           {
81               if(d<0)
82               {
83                   d-=2*dy;
84                   x++;
```

```cpp
85                  }
86                  else
87                  {
88                      d-=2*(dx+dy);
89                      y--;
90                      x++;
91                  }
92                  put_pixel(x,y,15);
93              }
94          }
95          else if(m<-1)
96          {
97              d = -2*dx-dy;
98              while(x<xb)
99              {
100                 if(d>0)
101                 {
102                     d-= 2*dx;
103                     y--;
104                 }
105                 else
106                 {
107                     d-= 2*(dx+dy);
108                     y--;
109                     x++;
110                 }
111                 put_pixel(x,y,15);
112             }
113         }
114     }
115     int main()
116     {
117         int x1,y1,x2,y2;
118         cout<<"Enter x1,y1 : ";
119         cin>>x1>>y1;
120         cout<<"Enter x2,y2 : ";
121         cin>>x2>>y2;
122         int gdriver = DETECT, gmode;
123         initgraph(&gdriver, &gmode, NULL);
124         brsnhm_line(x1,y1,x2,y2);
125         getch();
126         closegraph();
127     }
128
```