**PROGRAM NO. 10**

**AIM-** To display 4-bit region code for end point of a line and check whether line iscompletely on the screen or off the screen.

#include<iostream.h>

#include<conio.h>

#include<graphics.h>

void main()

{

int gd=DETECT,gm;

initgraph(&gd,&gm,"C:\\turboc3\\bgi");

float x,y;

int x1,x2,y1,y2;

x=getmaxx();

y=getmaxy();

cout<<"Enter the first coordinate of a line:\n";

cin>>x1>>y1;

cout<<"Enter the second coordinate of a line:\n";

cin>>x2>>y2;

// setcolor(BLUE);

line(x1,y1,x2,y2);

{

setcolor(WHITE);

line(x/3,0,x/3,y);

line(2\*x/3,0,2\*x/3,y);

line(0,y/3,x,y/3);

line(0,2\*y/3,x,2\*y/3);

outtextxy(2\*x/3-50,y/3-10,"1000");

outtextxy(x-50,y/3-10,"1010");

outtextxy(x/3-50,2\*y/3-10,"0001");

outtextxy(2\*x/3-50,2\*y/3-10,"0000");

outtextxy(x-50,2\*y/3-10,"0010");

outtextxy(x/3-50,y-10,"0101");

outtextxy(2\*x/3-50,y-10,"0100");

outtextxy(x-50,y-10,"0110");

}

if(x1&x2<x/3&&y1&y2<y/3)

{

outtextxy(x/3-50,y/3-10,"1001");

}

getch();

}

**OUTPUT:-**

