/\*Program to draw a line using BRESSENHAM'S algorithm\*/

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#include<graphics.h>

#include<iostream.h>

#include<conio.h>

#include<math.h>

void main()

{

int gd=DETECT,gm;

initgraph(&gd,&gm,"C:/Tc/bgi");

int x1,x2,y1,y2,delx,dely,x,y,p;

cout<<"\nEnter the starting point of line ";

cin>>x1>>y1;

cout<<"\nEnter the end point of line ";

cin>>x2>>y2;

delx=abs(x2-x1);

dely=abs(y2-y1);

x=x1;

y=y1;

putpixel(x,y,WHITE);

float m=(y2-y1)/(x2-x1);

if(m<1)

{

p=2\*dely-delx;

for(int i=1;i<=delx;i++)

{

if(p<0)

{

x++;

putpixel(x,y,WHITE);

p=p+2\*dely;

}

else

{

if(m>0)

{

x++;

y++;

}

else

{

x++;

y--;

}

putpixel(x,y,WHITE);

p=p+2\*dely-2\*delx;

}

}

}

else

{

p=2\*delx-dely;

for(int i=1;i<=dely;i++)

{

if(p<0)

{

y++;

putpixel(x,y,WHITE);

p=p+2\*delx;

}

else

{

x++;

y++;

putpixel(x,y,WHITE);

p=p+2\*delx-2\*dely;

}

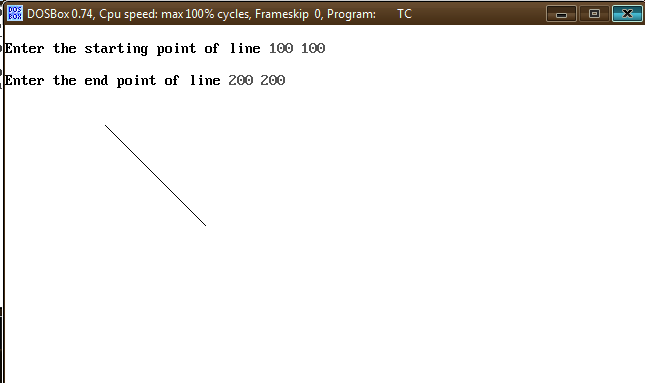
}

}

getch();

}

**OUTPUT**

****