BRESENHAM LINE DRAWING ALGORITHM

CODE:

#include<iostream.h>

#include<math.h>

#include<conio.h>

#include<graphics.h>

void main()

{

int gd=DETECT,gm;

int x1,y1,x2,y2,dx,dy,ddx,ddy,p0;

clrscr();

initgraph(&gd,&gm,"C:\\TC:\\BGI");

cout<<"enter x1 and y1:";

cin>>x1>>y1;

cout<<"enter x2 and y2:";

cin>>x2>>y2;

dx=abs(x2-x1);

dy=abs(y2-y1);

ddy=2\*dy;

ddx=2\*dx;

p0=(ddy-dx);

int i,count=0;

for(i=0;i<=dx;i++)

{

if(p0<0)

{

putpixel(x1+1,y1,WHITE);

p0=p0+ddy;

x1=x1+1;

}

else

{

putpixel(x1+1,y1+1,WHITE);

p0=p0+(ddy-ddx);

x1=x1+1;

y1=y1+1;

count++;

}

}

getch();

closegraph();

}

OUTPUT:

