BRESENHAM LINE DRAWING ALGORITHM

```
#include<graphics.h>

#include<stdio.h>

#include<conio.h>



int main()

{

        int x,y,x1,y1,x2,y2,p,dx,dy;

        int gd=DETECT,gm=0;

        initgraph(&gd,&gm, "");

        printf("\n Enter x1 cordinate: ");

        scanf("%d",&x1);

        printf("\n Enter y1 cordinate: ");

        scanf("%d",&y1);

        printf("\n Enter x2 cordinate: ");

        scanf("%d",&x2);

        printf("\n Enter y2 cordinate: ");

        scanf("%d",&y2);


        x=x1;

        y=y1;

        dx=x2-x1;

        dy=y2-y1;
```

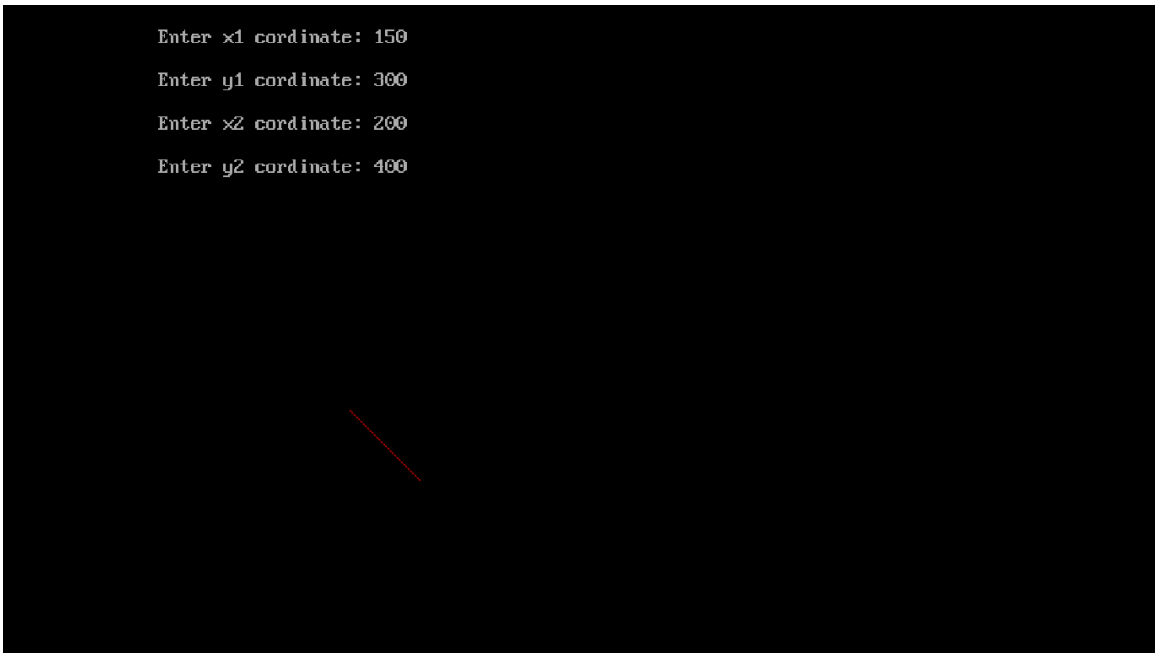
```
        putpixel (x,y, RED);
        p = (2 * dy-dx);

        while(x <= x2)
        {
                if(p<0)
                {
                        x = x+1;
                        p = p + 2*dy;
                }
                else
                {
                        x = x + 1;
                        y = y + 1;
                        p = p + (2 * dy) - (2 * dx);

                }
                putpixel (x,y, RED);

        }

        getch();
        closegraph();
}
```


Enter x1 cordinate: 150
Enter y1 cordinate: 300
Enter x2 cordinate: 200
Enter y2 cordinate: 400