

```

#include <stdlib.h>
#include <math.h>
#include <graphics.h>

void bres_line(int, int, int, int);
void bres_line(int xa, int ya, int xb, int yb)
{
    int dx=abs(xa-xb),dy=abs(ya-yb);
    int twoDy=2*dy, twoDxDy=2*(dy-dx);
    int p=2*dy-dx;
    int x, y, xend;
    if((ya-yb)/(xa-xb) <=1)
    {
        if(xa>xb)
        {
            x=xb;
            y=yb;
            xend=xa ;
        }
        else
        {
            x=xa;
            y=ya;
            xend=xb;
        }
        putpixel(x,y,WHITE);
        while(x<xend)
        {
            x++;
            if(p<0)
                p+=twoDy;
            else
            {
                y++;
                p+=twoDxDy;
            }
            putpixel(x,y,WHITE);
        }
    }
    else
    {
        if(ya>yb)
        {
            y=yb;
            x=xb;
            xend=ya ;
        }
        else
        {
            x=xa;
            y=ya;
            xend=yb;
        }
        putpixel(x,y,WHITE);
        while(y<xend)
        {
            y++;
            if(p<0)
                p+=twoDy;
            else
            {
                x++;
                p+=twoDxDy;
            }
            putpixel(x,y,WHITE);
        }
    }
}

int main()
{
    initwindow(400, 400, "Bresenham - computer table");

    bres_line(75,50,300,50);

```

```

bres_line(50,150,325,150);
bres_line(75,50,50,150);
bres_line(300,50,325,150);

bres_line(50,160,325,160);

bres_line(50,150,50,300);          //left
bres_line(60,160,60,300);
bres_line(50,300,60,300);
bres_line(75,245,75,160);          //left inner vert surface
bres_line(75,245,60,285);

bres_line(315,160,315,300);          //right
bres_line(325,150,325,300);
bres_line(315,300,325,300);
bres_line(300,245,300,160);          //right inner vert surface
bres_line(300,245,315,285);

bres_line(60,295,315,295);
bres_line(60,285,315,285);

bres_line(255,285,255,180);
bres_line(265,285,265,180);
bres_line(265,180,255,180);
bres_line(261,160,265,180);          //thickness from top
bres_line(251,160,255,180);
bres_line(251,160,251,245);          //inner vert left surface
bres_line(251,245,255,285);

bres_line(265,245,300,245);
bres_line(75,245,251,245);

bres_line(85,173,85,180);
bres_line(250,173,250,180);
bres_line(85,180,250,180);
bres_line(85,173,250,173);
bres_line(93,160,85,173);
bres_line(245,160,250,173);
bres_line(85,160,85,180);

while ( !kbhit() )
    delay(100);

return EXIT_SUCCESS;
}

```

