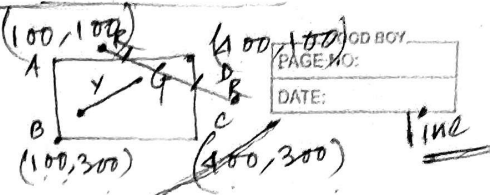


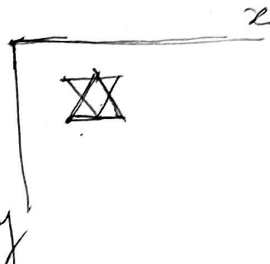
1. (150, 275) and (300, 150)
2. (300, 350) and (450, 350)
3. (200, 50) and (500, 250)



Use Cohen-Sutherland clipping algorithm to decide the visibility the lines (show the lines in different color) and clip the line that is candidate for clipping.

- D. Write a program to draw Hermite curve.
- E. Write a program to draw Bezier curve.

```
void triangle (int x1, int y1, int x2, int y2, color
{
    int x3, int y3)
{
    line (x1, y1, x2, y2);
    line (x2, y2, x3, y3);
    line (x1, y1, x3, y3);
}
}
```



Translation

$$T = \begin{pmatrix} 0 & 0 & +x \\ 0 & 0 & +y \\ 0 & 0 & 1 \end{pmatrix}$$

$$\Delta = \begin{pmatrix} x_1 & x_2 & x_3 \\ y_1 & y_2 & y_3 \\ 1 & 1 & 1 \end{pmatrix}$$

$$= \begin{pmatrix} x_1' & x_2' & x_3' \\ y_1' & y_2' & y_3' \\ 1 & 1 & 1 \end{pmatrix}$$

triangle (

$$\begin{pmatrix} \cos \theta & -\sin \theta & 0 \\ \sin \theta & \cos \theta & 0 \\ 0 & 0 & 1 \end{pmatrix}$$

$\frac{1}{\sqrt{2}}$