

Exp 10 Program for Line Clipping by Sutherland-Cohen Algorithm Date: ??

Aim: Implement Line Clipping by Sutherland-Cohen Algorithm

Theory: The Cohen–Sutherland algorithm is a computer-graphics algorithm used for line clipping. The algorithm divides a two-dimensional space into 9 regions and then efficiently determines the lines and portions of lines that are visible in the central region of interest (the viewport).

In the algorithm, first of all, it is detected whether line lies inside the screen or it is outside the screen. All lines come under any one of the following categories:

1. Visible: If a line lies within the window, i.e., both endpoints of the line lies within the window. A line is visible and will be displayed as it is.
2. Not Visible: If a line lies outside the window it will be invisible and rejected.
3. Clipping Case: If the line is neither visible case nor invisible case. It is considered to be clipped case.

Procedure:

Write the algorithm

Write the source code

Draw output vth viewport

Conclusion:??????????????