

1. a) Given, $(-200, -100)$ and $(200, 100)$ are the diagonal corners of the clip region.

Using Cohen-Sutherland line clipping algorithm calculate the coordinates of start and end points of the clipped portion of the line from

- (i) $(-100, -100)$ to $(200, 0)$
- (ii) $(50, -105)$ to $(150, -200)$
- (iii) $(-160, 140)$ to $(-240, 80)$
- (iv) $(-300, 120)$ to $(250, -110)$

2. a) Formulate t for Cyrus-Beck line clipping algorithm and make a list of formulas of t and its related parameters for all the boundaries of a rectangular window.

b) Calculate the value of t of the lines from 1(a) for all edges specify whether they are entering or leaving t . [Given, $(-200, -100)$ to $(200, 100)$ be the clip region].

c) Calculate the value of t of the following lines for all edges specify whether they are entering or leaving t . [Given, $(0, 0)$ to $(300, 200)$ be the clip region].

- (i) $(100, 0)$ to $(400, 100)$
- (ii) $(250, -5)$ to $(350, -100)$
- (iii) $(40, 240)$ to $(-40, 180)$
- (iv) $(-100, 220)$ to $(450, -10)$