

$$y_1' = y_1 + (\Delta y \times u_1) = 0$$

$$x_2' = x_1 + (\Delta x \times u_2) = 7.5$$

$$y_2' = y_1 + (\Delta y \times u_2) = 15$$

A/A/18

POLYGON CLIPPING

Sutherland - Hodgeman Polygon Clipping

CURVE ~~CLIPPING~~ clipping

Text clipping

If the ~~total text~~ total text inside the window only then clipped.

When ~~text~~ text is tilted we take only those characters which are completely inside.

Types of Text Clipping

- All or None string clipping strategy
- All or None character clipping strategy

Extensive Clipping

1. What is window? What is viewport?
2. What is clipping? Applications of clipping.
3. What are world and device coordinate system.
4. What do you mean by windowing transformation / viewing trans. / window to viewport trans.!
5. Explain viewing pipeline.
6. Define clip window.
7. Explain viewport coordinates & normalized coordinates.
8. Why do we need normalized device coordinates?
9. Explain several effects of viewing.
SAQ.
10. Explain (a) ^{panning} ~~panning~~ effect
no view effect
11. Imp. of clipping.
12. Explain viewing coordinate reference frame.
13. Write in details window to viewport coordinate ~~trans~~ transformation.
14. What do you mean by workstation transformation?
15. Explain point clipping.
16. ~~state~~ of basic steps of line clipping.
17. Why parametric eq^{ns} are used in line clipping algo.!
18. Write algorithms and practice numericals of the foll. :-

- (i) Cohen ~~and~~ Sutherland line clipping
- (ii) Liang-Barsky line clipping
- (iii) Cyrus Beck
- (iv) Polygon clipping using Sutherland, Hodgman

19. Short notes:

- (i) Curved clipping
- (ii) Text clipping
- (iii) Extension clipping
- (iv)

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Viewing Pipeline
 viewing coordinates