Clipping operations:

- Generally, any procedure that identifies those portions of a picture that are either inside or outside of a specified region of space is referred to as a clipping algorithm or simply clipping.
- The region against which an object is to clip is called clip window.
- Clip window can be general polygon or it can be curved boundary.

Application of Clipping:

- It can be used for displaying particular part of the picture or display screen.

Identifying visible surface in 3D views.

Antialiasing

Create objects using solid-modeling procedures.

Displaying multiple windows on same screen.

Drawing and painting.

Point clipping.

- In point clipping we eliminate those points which are outside the clipping window and draw points which are inside the clipping window.
- Here we consider clipping window is rectangular boundary with edge (x_{wmin}, x_{wmax}, y_{wmin}, y_{wmax})
- So for finding wether given point is inside or outside the clipping window we use following inequality:

$$x_{wmin} \leq x \leq x_{wmax}$$
$$y_{wmin} \leq y \leq y_{wmax}$$

- If above both inequalities are satisfied then the point is inside otherwise the point is outside the clipping window.