# Polygon Triangulation

**Data Structure Used:** To store the vertices, I used structure with the following attributes:

* X coordinate, Y coordinate
* Sequence of input
* Vertex type
* Index of the helper vertex

To store the edges, only the starting point is used. As the input is scanned in counter clockwise direction, so the other vertex of the edge must be the next point in input.

A set is maintained to store the edges in T. (<)Operator was overloaded to maintain the ordering in the set. To find an edge immediately left of a vertex, the index in which this vertex would be inserted was calculated. The edge of the previous index is the immediate left edge.