CENG 773  
Computational Geometry  
Assignment #3

Due Date: October 28, 2011 (in class)

Prove that in a doubly connected edge list it is possible to find all the incident edges of a vertex \( v \) (for which the vertex is their origin) by using \( \text{Next}(\text{Twin}(\text{IncidentEdge}(v))) \) repeatedly. Prove that this loop traverses the incident edges in a clockwise order. Assume that there are no isolated vertices and each incident edge of the vertex \( v \) is an edge on a boundary cycle (inner or outer boundary).