

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).