East West University Department of Computer Science and Engineering

CSE207 – Data Structures: LAB 02 Course Instructor: Ms. Tanni Mittra

Linked List

Problem 1:

Write an algorithm that accepts a list implemented using a linked list, traverses it, and returns the data in the node with the smallest key value.

Problem 2:

Write an algorithm that traverses a list implemented using a linked list and deletes all nodes whose keys are negative.

Problem 3:

Write an algorithm that traverses a list implemented using a linked list and deletes the node following a node with a negative key.

Problem 4:

Write an algorithm that appends a list to itself.

Problem 5:

Write an algorithm that swaps (exchanges) two nodes in a list. The nodes are identified by number and are passed as parameters. For example, to exchange nodes 5 and 8, you would call swap (5, 8). If the exchange is successful, the algorithm is to return true. If it encounters an error, such as an invalid node number, it returns false. Use linked list implementation.