



EAST WEST UNIVERSITY

Department of Computer Science and Engineering

B.Sc. in Computer Science and Engineering Program

Lab Examination, Fall 2021 Semester

Course:	CSE 207- Data Structures, Section-1
Instructor:	Dr. Maheen Islam, Associate Professor, CSE Department
Full Marks:	30 Marks
Time:	1 Hour 20 Minutes

Problem-1:

Write a program that will read a list of numbers without printing them until a negative number is encountered. When the program scans a negative number then it prints previous items from the list in reverse order. If there is no item to print then print an error message and stop the program. This process is continued until all numbers are scanned. Use Linked list implementation of Stack to solve the problem.

Example:

Input:

List of number: 1 2 3 4 5 -1 4 5 6 7 8 9 10 -2 11 12 -3 1 2 3 4 5

Output: 5 4 3 2 1 10 9 8 7 6 5 4 12 11

Input:

List of number: 1 2 3 4 5 -1 4 5 6 7 8 9 10 -2 -2 11 12 -3 1 2 3 4 5

Output: 5 4 3 2 1 10 9 8 7 6 5 4 Error!!

Problem-2:

Write a program to convert an array into a Binary Search Tree by inserting the elements as nodes in BST, processing elements in the given order in the array. Also find the height of the created Binary Search Tree.

Example:

Input : Input array size: 7

Input array elements: 4 6 2 7 9 8 3

Output : Height of BST = 4