Introduction to Basic Data Structures

Module 14.5: Practice Day 01

(Practice Questions)

Topics:
1. Stack
2. Queue

Practice Problem 1

Question: Take two stacks of size N and M as input and check if both of them are the same or not. Don't use STL to solve this problem.

Sample Input	Sample Output
5 10 20 30 40 50 5 10 20 30 40 50	YES
5 10 20 30 40 50 4 10 20 30 40	NO
5 10 20 30 40 50 5 50 40 30 20 10	NO

Practice Problem 2

Question: Take a stack of size N and a queue of size M as input. Then check if both of them are the same or not in the order of removing. You should use STL to solve this problem.

Sample Input	Sample Output
5 10 20 30 40 50 5 10 20 30 40 50	NO
5 10 20 30 40 50 4 10 20 30 40	NO
5 10 20 30 40 50 5 50 40 30 20 10	YES

Question: Take a stack of size N as input and copy those elements to another stack to get the values in the order they were inserted and print them. You should use STL to solve this problem.

Sample Input	Sample Output
5 10 20 30 40 50	10 20 30 40 50

Question: Take a queue of size N as input. You need to copy those elements in another queue in reverse order. You might use stack here. You should use STL to solve this problem. After copying in another queue, print the elements of that queue.

Sample Input	Sample Output
5 10 20 30 40 50	50 40 30 20 10