CSCE 221 Quiz 3.5

19 October 2022

You must show your work in order to get credit.

If you need to make an assumption in order to solve the problem, make your assumption explicit. Put your UIN in the top left, section number in the top middle, and name in the top right of the page. Everything you write should be at least half an inch from the edge, including your name, section number, UIN, and all your work.

Problem 1.

Implement a queue with a stack.

You must write a C++ class named queue that has a single data member which is a stack. For brevity, assume the type of data stored is int (i.e. you do not need to make a template).

Problem 2.

Starting with an empty queue, perform the following sequence of operations and show the state of the queue after each operation.

You must explicitly state which end is which in your depiction.

insert 27

insert 90

remove

insert 70

remove

insert 38

insert 24

remove

remove

remove