

# Assignment: Sorting a Queue

January 2024 CSE 106 Online C1-C2

Time: 40 minutes

## Problem Description

In this task, you are required to sort the elements of a queue in increasing order using a stack. **You can use only one stack to sort the queue. You are not allowed to use any additional queues, stacks or data structures like arrays.**

## Example Output

Here is an example of the expected behavior:

### Sample Input

```
4
4
10 10 4 5
5
11 3 12 4 3
3
10 10 10
1
100
```

### Sample Output

```
4 5 10 10
3 3 4 11 12
10 10 10
100
```

## N.B.

- Use the stack implementation of **StackUsingQueue.h** from the second problem of your offline. When including the header files just include **iostream** and **StackUsingQueue.h**. Do not include other header files like **QueueArray.h** and **QueueLinkedList.h**. Otherwise you may get some errors.
- Rename the **.cpp** file as **2205XXX.cpp** and submit that. Do not zip anything.