

# Lab 8

## Spring 2022

### Generic Data Structure

Solutions limited in scope to:		
• ArrayList	• Stack	• Queue

#### Submission Rules:

1. Submissions must be zipped into a **handin.zip** file. Template files (Stack.java and Queue.java) are provided with the assignment. Fill the methods in the template file.
2. You must use standard input and standard output for ALL your problems. It means that if the input is needed the input should be entered from the keyboard while the output will be displayed on the screen.
3. The output of your solutions must be formatted exactly as the sample output to receive full credit for that submission.
4. Compile & test your solutions before submitting them. Programs that do not compile will receive 0 points.
5. This lab is worth a max total of 40 points.
6. Submission:
  - You have unlimited submission attempts until the deadline passes
  - You'll receive your lab grade immediately after submitting
7. Use the helpdesk if you need assistance with the assignment and start early. Read through the documentation provided to understand the requirements of the code.

8. Due Date: **April 17, 11:59 PM**. Submit the assignment to **gitlab** and **autolab**.

**Problem 1: Stack (20 points)**

Implement a custom stack that works as a normal stack. You have to fill out the methods given to you in the stack template. DO NOT delete any methods from there. A tester file for this class is provided to you.

Each method in the file is commented and tells you what the method needs to do.

**Problem 2: Queue (20 points)**

Implement a custom queue. You will need to fill out all the methods given to you in the template file. DO NOT delete any methods from the template file. A tester file is provided to you.

**NOTE:**

1. The given file has instructions on what the methods require. Look at the main method and the tester file if you need hints on that.
2. Start early and use the help desk if you need help. The help desk might be busy with a lot of students when the assignment is due.
3. The grades in autolab will be your final grade for this lab.
4. If you have any problems, contact me soon. Email: mpanta2@uno.edu