# Queues

**Objective:** After completion of this lab, you will be able to

• identify basic operations of queues in C++.

#### Lab Exercise

Download Queue.h, Queue.cpp, and Sample\_Queue\_tester.cpp from iLearn. The Sample\_Queue\_tester.cpp is only provided as a reference. Make a project with the three files. Then, modify the programs according to instructions given below.

In text-editing and word-processing applications, one formatting convention sometimes used to indicate that a piece of text is a footnote or an endnote is to mark it with some special delimiters such as { and }. When the text is formatted for output, these notes are not printed as normal text but are stored in a queue for later output. Write a program that reads a document containing endnotes indicated in this manner, collects them in a queue, and prints them on the screen.

For this lab, you will create a text file called sample.txt and put the following paragraph in it.

This part is the beginning. {This part is the footnote.} This part is the end.

# **Grading**

I will download your code on my computer and execute it. If your code does not compile, you may lose more than 50% of your points (based on my discretion). If your code compiles, but still produces incorrect results you may still lose more than 30% of your points (based on my discretion).

You are expected to provide code which will execute on Visual Studio and display the output.

Your code should have the following characteristics for you to get full points on the assignment

- 1. Compile without error.
- 2. Produce correct output.
- 3. Good programming structure.
- 4. Comments. (Title, Abstract, Author, ID, and Date are mandatory.)
- 5. Meaningful and related variable names.

### What to turn in?

Submit your source programs and 'HomeworkSubmission\_yourlastname.pdf' as a single zipped file on iLearn.

If you do not submit the above-mentioned documents in the format specified your assignment will not be graded.

## Homework Submission yourlastname.pdf

For each homework problem, you are expected to submit screenshots of the results obtained from running your code. You should also explain what each screenshot means and why the result on the screenshot is correct.

This link explains how to take screenshots in Mac and Windows. http://www.take-a-screenshot.org/