# Department of Computing

**CS250: Data Structure and Algorithms**

**Class: BSCS 5AB**

# Lab 5: Queues

**Date:25th October, 2016**

**Time: 9am- 12pm / 2pm – 5pm**

# Instructors: Shamyl Bin Mansoor / Akhtar Munir

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# Lab 5: Queues

**Introduction**

In this lab we will be implementing a queue using arrays and linked lists.

**Objectives**

To understand the implementation of a queue

**Tools/Software Requirement**

Visual Studio c++.

**Lab Tasks**

You are required to upload the lab tasks on LMS and the name of that tasks must be in this format YourFullName\_reg#.cpp

Remember to comment your code properly.

**Description:**

<https://www.cs.usfca.edu/~galles/visualization/QueueArray.html>

<https://www.cs.usfca.edu/~galles/visualization/QueueLL.html>

**Task 1**

Implement a Queue using arrays by coding the following operations:

* Enqueue(element)
* element Dequeue()
* isEmpty()
* isFull()

**Task 2**

Implement a Queue using linked lists by coding the following operations:

* Enqueue(element)
* element Dequeue()
* isEmpty()

**Deliverable**

Students are required to upload the lab task on LMS before the deadline.