Algorithms and Data Structures for Data Science
lab_quacks

CS 277
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Learning Objectives

Practice stacks and queues
Queue

A **Queue** is a linear structure which follows a particular order in which the operations are performed. The order is **First In First Out (FIFO)**.

Queue is pronounced "Q" followed by four letters that are silently waiting their turn.
Stack

**Stack** is a linear data structure which follows a particular order in which the operations are performed.

**Order:** LIFO (Last In First Out)
Looping through quacks

```
while not q.empty():
    val = q.dequeue()

for i in range(15):
    q.enqueue(i)
```

```
while not s.empty():
    val = s.pop()

for i in range(15):
    s.push(i)
```