Queues

A **queue** is a particular kind of [collection](http://www.wikipedia.org/wiki/Collection_(computing)) in which the entities in the collection are kept in order and the principal (or only) operations on the collection are the addition of entities to the rear terminal position and removal of entities from the front terminal position. This makes the queue a [First-In-First-Out (FIFO) data structure](http://www.wikipedia.org/wiki/FIFO_(computing)).

In a FIFO data structure, the first element added to the queue will be the first one to be removed. This is equivalent to the requirement that once an element is added, all elements that were added before have to be removed before the new element can be invoked.

/////Stack has 3 operations:

1. Push: First you need to check if the stack is empty or full. If the stack is empty push the element in the stack and assign that as the top of the stack. If the stack is full indicate the user about it. If the stack is not full push the element in the stack and assign that element as the top of the stack.

Pushing 2

Pushing 1

Empty Stack

2 Top

1

1 Top

1. Pop: First you need to check if the stack is empty. If the stack is empty then indicate the user about it. If the stack is not empty delete the last element pushed in the stack which is the topmost element in the stack.

Full Stack

All elements popped

4 Popped

4 Top

3 Top

3

2

2

1

1

1. Display: The stack is displayed from top to bottom.