**QUEUE: ADT and CDT2**

Consider the following definition of a queue. The ADT is the same as before, but the CDT changes.

**Abstract Data Type** - **Queue**:

* Data: set of ordered elements. The order is established by the sequence of entry.
* Operations: Elements enter and exit the queue following the FIFO mode.

**Concrete Data Type - Queue (CDT2):**

* Data: array of elements
* Operations: positions of entry and of exit (bottom and head) are stored in two different indexes pointing to the array positions where to enqueue or dequeue.

**ACTIVITY 2**

1. Reflect on the proposed CDT2: instead of using the array as seen in the previous lesson, i.e. using positions from 0 (head) to N (bottom), here we have two indexes, one pointing to the head and one pointing to the bottom, both of them moving circularly in the array following enqueue and dequeue operations.

What’s the difference, i.e. what is gained or lost with this new CDT2 with respect to CDT1?

1. Implement the CDT2 in OOP defining a class QUEUE. Use pseudocode and/or a programming language.