

Ceng 241 Lab Work 5

Classes and Data Abstraction IV: Dynamic Memory Management with Operators new and delete

Implement a **Queue** class, where a queue is a collection of zero or more elements. For this exercise, the elements should be **doubles**. The public interface consists of methods to

- Create a Queue
- Add a new element to a Queue: an element is added to a queue at its rear
- Remove an element from a Queue: an element is removed from a queue at its front
- Enumerate the elements in the Queue
- Compute the intersection of two Queue's Q1 and Q2, that is, the set of elements that belong to both Q1 and Q2
- Compute the union of two Queue's Q1 and Q2, that is, the set of elements that belong to Q1 or Q2 or both.
- Compute the difference of two Queue's Q1 and Q2, that is, the set of elements that belong to Q1 but not to Q2