

Ceng 241 Lab Work 5

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

Implement a **Set** class, where a set is an unordered collection of zero or more elements with no duplicates. For this exercise, the elements should be **doubles**. The public interface consists of methods to

- Create a Set
- Add a new element to a Set: an element is added to a set at its front or rear
- Remove an element from a Set
- Enumerate the elements in the Set
- Compute the intersection of two Set's S1 and S2, that is, the set of elements that belong to both S1 and S2
- Compute the union of two Set's S1 and S2, that is, the set of elements that belong to S1 or S2 or both.
- Compute the difference of two Set's S1 and S2, that is, the set of elements that belong to S1 but not to S2