

## Assignment 4

The goal of this assignment is to reinforce implementation of dynamic arrays in C++. Specifically, the assignment is to implement a set using a dynamic array. You need to implement the following set operations

- union
- intersection
- relative complement
- insertion - if the element is already in the set, then nothing happens
- deletion - if the element is not in the set, then nothing happens
- query to check whether an element is in a set
- query to find the number of elements in a set
- display the set
- destructor
- copy constructor
- overloading assignment operator

The assignment must follow the author's guidelines of preconditions and postconditions for the functions. In addition, the efficiency of each function must be stated. Please email your submission to your instructor by 8:00 am on Monday, February 15<sup>th</sup>.