# CSC240 PE18 Assignment

# Chapter 18 Searching and Sorting Algorithms

Stub program (and function *iterative* version of *sequential search)* is provided.

Write a program to find the number of comparisons using *sequential search, binary search, recursive sequential search, recursive binary search,*

Implement functions using array:

1. *bubble sort, that you are going to use before using any binary search.*
2. *iterative* *binary search (modify algorithm given in the chapter to count the number of comparisons )*
3. *recursive sequential search.*
4. *recursive binary search.*

Test your functions first and output the number of comparisons for all 4 search functions.

Consider cases:

1. item is in the list, print its position.
2. item is not in the list.

From input file in.txt get

1. item to search,
2. list of elements.

Output to output file out<yourLastName>.txt

(For me output file would be named outMurashkina.txt)