

Lab 3: Singly-linked Lists

Using the **start project**, implement the functions listed below—write the **declaration** in the **AnyList.h** file where indicated, and write the **definition** in the **Functions.cpp** file where indicated.

- **AnyList member function search**
 - **Parameter:** An int storing an element to be searched.
 - Traverses the list to search for the element passed by the parameter. If the element is found, the function returns true; if the element is not found, the function returns false.
 - Traverse the list using a **WHILE** loop; **stop when you find the element**.
 - If the list is empty, print the error message **"The list is empty."**
 - **Assumption:** All elements are unique.

- **AnyList member function commonEnds**
 - **Parameter:** An object of the class AnyList
 - The function returns true if the calling object and the parameter object have the same first element **AND** the same last element.
 - Example:
 - Calling object: [1, 2, 3], Parameter object: [7, 3]) → false
 - Calling object: [1, 2, 3], Parameter object: [7, 3, 2]) → false
 - Calling object: [1, 2, 3], Parameter object: [1, 3]) → true

The **main** function in the **Main.cpp** file contains a few test cases. Modify the test cases to check different lists.