Chapter 4

ADT Sorted List

After studying this chapter, you should be able to

* Describe the ADT Sorted List from three perspectives
* Implement the following Sorted List operations using an array-based implementation:
* Create and destroy a list
* Determine whether the list is full
* Put an element into the list
* Get an element from the list
* Delete an element from the list
* Create an array in dynamically allocated storage
* Implement the list operations outlined above using a linked implementation
* Implement the binary search algorithm
* Compare the two implementations of the ADT Sorted List in terms of Big-O approximations
* Compare the implementations of the Unsorted List ADT and the Sorted List ADT in terms of Big-O analysis
* Distinguish between bounded and unbounded ADTs at the logical and implementation levels
* Identify and apply the phases of the object-oriented methodology