

Programming Fundamentals

Lab #7

Topics

- Abstract Data Types
- Stacks
- Linked lists

Concepts

Stack implementations
Linked node, linked list
List traversal

Before beginning, download AdditionalExamples from BlackBoard and add to a new project in Eclipse.

Exercise 1

Create a new `Driver` class with a `main` method. In this method, do the following:

1. Create an instance of an `ArrayStack` and a `LinkedStack` class.
2. Push the following `int`'s onto the two stacks: (1, 7, 3, 4, 9, 2)
3. Pop off all the elements from the stacks, displaying each `int` as it's removed

Exercise 2

Modify the `LinkedStack` class to include a new method called `removeBottomHalf`, which removes the half of elements sitting at the bottom of the stack.

Test the method using the `Driver` program.

What is the time complexity of this method?