Analysis document: LinkedListStack

● Graded

Student

HARRY KIM

Total Points

18 / 30 pts

Question 1

Question 1

1 / 1 pt

✔ **– 0 pts** Correct

Question 2

Question 2

2 / 2 pts

✔ **– 0 pts** Correct

Question 3

Question 3

8 / 20 pts

`push()`

✔ **– 1 pt** Plot is missing a descriptive title, labelled axes, or otherwise incomplete

✔ **– 3 pts** No explanation of the growth rate and running time for each stack class, and why

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`pop()`

✔ **– 1 pt** Plot is missing a descriptive title, labelled axes, or otherwise incomplete

✔ **– 3 pts** No explanation of the growth rate and running time for each stack class, and why

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`peek()`

✔ **– 1 pt** Plot is missing a descriptive title, labelled axes, or otherwise incomplete

✔ **– 3 pts** No explanation of the growth rate and running time for each stack class, and why

Question 4

Question 4

4 / 4 pts

✔ **– 0 pts** Correct

Question 5

Question 5

3 / 3 pts

✔ **– 0 pts** Correct

Question 6

Late Penalty

0 / 0 pts

✔ **– 0 pts** submitted before deadline

Questions assigned to the following page: 1, 2, and 3

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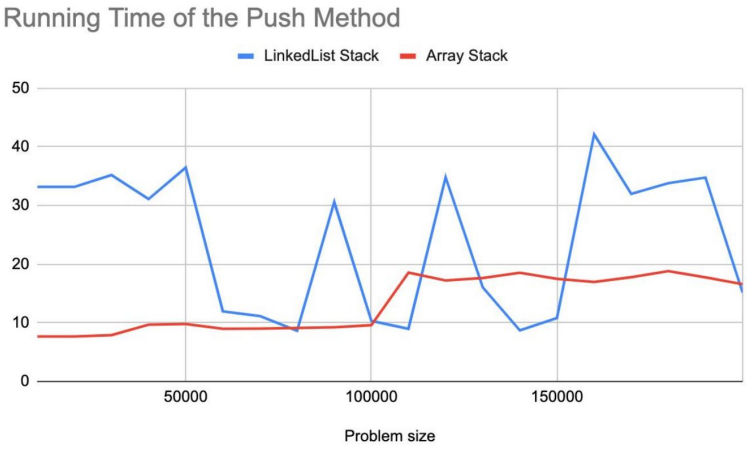
10/14/2020
CS 2420

Analysis Document — Assignment 6

1. I am **not** invoking one of my three exemptions for pair programming due to an extenuating circumstance. My programming partner is Braden Morfin, and I submitted the program to Gradescope.

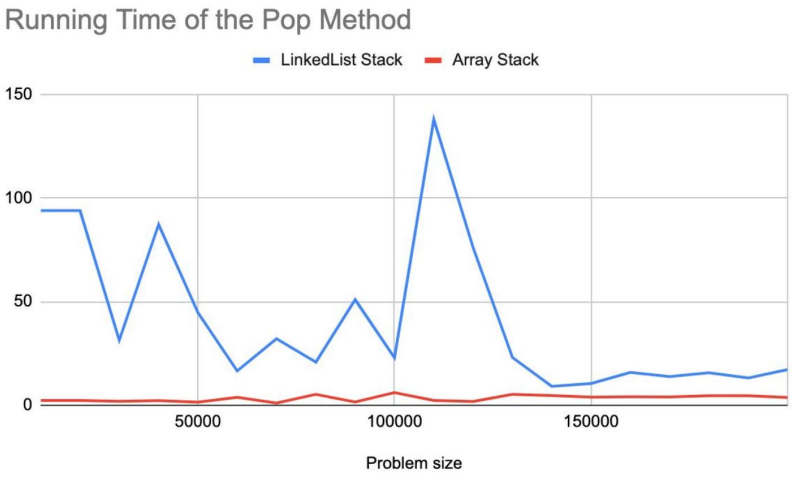
2. Pair programming experience:
   - My partner and I spent about 10 hour to complete the assignment and create tests for the assignment. We had lots of debugging to do for this assignment.
   - Braden's very smart and is a nice person, he's good at communication, and he codes very well. I would plan to work with Braden again.

3. Running time of Array stack and LinkedList stack for push, pop, and peak.

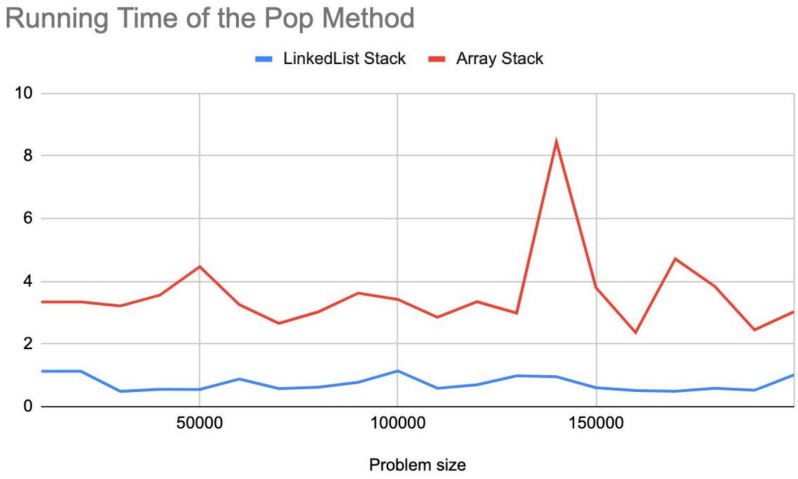


a.

Questions assigned to the following page: 3, 4, and 5



b.



c.

4. Based on the data from question 3, the Array stack class seemed to be more efficient for use in our BalancedSymbolChecker application because the Array stack had faster run times for more methods. It seemed like on average, the Array stack was faster for the push and pop methods, but the LinkedList stack was faster only for the peek method.

5. I would also keep track of the line and column number of the unmatched opening symbol by creating a new function object which holds the opening symbol itself and the opening symbol's column number and row number and use getter and setter methods to return the desired numbers.