

CSC148 Summer 2018: Exercise 4

Due: Thursday, June 7th @ 11PM

In this exercise, you are to implement a LinkedList method called `swap_front_back()`.

To start, download [ex4.py](#) and [ex4_pyta.txt](#) and read through the code provided in the `if __name__ == '__main__':` block.

Read through the docstring for `swap_front_back()` carefully and implement the method.

Please document your code properly (type annotations, writing docstrings and docstring examples, etc.).

This exercise will require you to have PythonTA installed. If you haven't done so already, go through [lab1](#) and the instructions on the [Software](#) page to install and set up PyCharm with PythonTA.

Submission

Exercises are to be submitted through [MarkUs](#) in the `ex4` folder. Submit only `ex4.py`.

To log in to MarkUs, use your UTORid as the log-in name. The password is your teaching labs password. If you have not set this up or have forgotten your password, go to the [Teaching Lab's Account Management Page](#) and (re)set your password.

Grading Scheme

This exercise will be graded out of 4 marks, broken down as follows:

- 2 marks for being able to run the client code without issue (no assertion errors raised)
- 1 mark for passing PythonTA
- 1 mark for passing hidden test cases (which use your client code in other ways)
 - Details on what the hidden test cases will/won't test are describe below.

All of these marks are 'all-or-nothing' (i.e. you'll either get 0 on that criteria, or full marks).

Hidden Test Cases

Things that the hidden test case might test:

- Swapping an empty LinkedList
- Swapping a LinkedList with only 1 element
- Swapping a LinkedList with n many elements