ECE444-Lab5: Test-Driven Development

Goal:

- Introduction of TDD
- Be able to run unit test for your Flask app

Plan:

Student first watch the recording of Introduction to <u>Test-Driven Development</u>. (Please make sure you access it with your UofT account.) The slides can be found under Lab/Slides on Quercus. TAs host in-person Q&A sessions.

Activities:

Read and follow the tutorial to get familiar with TDD and corresponding techniques.

https://realpython.com/python-testing/

Deliverables: Hope you have started to develop your system for Project 1. We expect you to practice test-driven development during the process.

Submission & Evaluation:

- (5pt) Create an empty repo with <u>your own GitHub account</u> and replay the following example: https://github.com/mjhea0/flaskr-tdd
 - You should follow the instructions from "First Test" to "Conclusion" (we suggest skipping section "Deployment" and "Postgres Heroku" for this lab, as it involves using Heroku for hosting the site, which is a paid service. We do not require using Heroku service for the task. For the goal of this lab, following the instructions to run them locally would be good enough) and generate a Flask project that is similar to the Flaskr in the end.
 - Submit the repo url to Quercus, name format: ECE444-F2023-Lab5, we expect to see at least 3 commits in the repo.
- (3pt) Add test cases to your group project. Submit the url of the function(s) you added to your project, for example: https://github.com/mjhea0/flaskr-tdd/blob/master/tests/app test.py#L53-L64

We expect to see at least 1 unit test function written by you, please identify them in the README and mention your name in the code comment.

(2pt) Briefly Answer this question (~half page): What are the pros and cons of TDD?
Add a section in README file in your project (i.e., " ECE444-F2023-Lab5") to answer the question.