

Instructions for the students

I. Installation of otter grader and execution of test cases

Step 1: Install otter-grader library

The otter library has to install once in the local system using the below command.

```
pip install otter -- grader
```

If the student wants to work on google colab, then the otter-grader library has to run the above command whenever the student opens the colab.

Step 2: Import necessary libraries

Once the otter-grader library is installed, run the below command to initiate auto-grading:

```
Import os
```

```
import otter
```

```
grader = otter.Notebook()
```

Step 3: Creation of test cases folder

The student should create a folder of "tests" in the local system (or google colab) and have all the test cases in that container.

Note: The test case files are in .py format.

Step 4: Verifying the answer with test case

Once the code is written for the question, the student can check the answer by executing the below command:

```
grader.check("question_number")
```

Note: The question number should match with the file name respective test case of that question. For example, if the file name of the first question is "q1.py", then the command will be *grader.check("q1")*.

If the answer is correct the above command displayed the result as "q1 passed". If not, it's displayed the result as "test case failed". The particular error message is displayed for the questions if it is set by the instructor.

Step 5: Verifying all answers at once

Repeat step 4 to check the test cases of all the questions individually. Students can check all the test cases at once by executing the below command at the end of the notebook:

```
grader.check_all()
```

II. Submission of notebook

Students are allowed to submit one of the files either *.ipynb* or *.zip* into the grade scope.

Students either can include a tests folder or not. Also, it is not mandatory to check all the test cases before submitting the assignment. Once the student submits the file into the grade scope, the autograder will grade within a few seconds for the questions for which auto-grade is set up.

Note: Students must maintain the notebook format and variable names provided by the instructor before submission for a smooth flow of the process.