

CS 150
HOMEWORK 2: DEFINING CLASSES IN PYTHON

Create a new Python script file that you will name *yourname_homework3.py*. Save this file in a folder on your computer where you will keep all your homework assignments. Write some Python code inside this file that I will be able to run on my computer without errors.

When finished, upload your file in Google Classroom using the Homework 3 assignment link. Don't forget to add comments at the beginning of each task and throughout your code for clarity.

TASKS

1. We are going to use the Fraction class for the next few problems. Implement the simple methods `get_num` and `get_den` that will return the numerator and denominator of a Fraction object.
2. Modify the Fraction class so that `gcd` is used to reduce fractions immediately.
3. Implement the simple arithmetic subtraction operator for the Fraction class (use name `__sub__`)
4. Implement the simple arithmetic multiplication operator for the Fraction class (use name `__mul__`)
5. Implement division for Fraction class (`__truediv__`)
6. Implement the remaining relational operators greater than, greater or equal, less than, less or equal and not equal (`__gt__`, `__ge__`, `__lt__`, `__le__` and `__ne__`)