

CICS 397A – Fall 2020

# Homework 0

**Due Thursday, September 10th at 11:59pm**

*You are encouraged to discuss the assignment in general with your classmates, and may optionally collaborate with one other student. If you choose to do so, you must indicate with whom you worked. Multiple teams (or non-partnered students) submitting the same code will be considered plagiarism.*

*Code must be written in a reasonably current version of Python (>3.0). You are free to use Python's standard modules for data structures and utilities, as well as the pandas, scipy, and numpy modules if you really want.*

## Python Calisthenics

The goal of this assignment is to give you some practice modifying and running Python code, as well as expose you to fundamental Python constructs, functions, and libraries. The included file `python_practice.py` contains skeleton code for you to flesh out.

For each of the exercises, you'll need to write the body of one of the function stubs (see the comments in the code for more details). You are welcome to define additional functions if you'd like, but do not change the names of the existing functions, and pay attention to the types of the expected return values.

When you execute your program, the `main()` function will print out the results of the functions in the exercises. Note that the expected output is in the comments of `main()`. You can run your program from within VSCode or from any Unix(-like) command terminal program:

```
(base) purple:homework0 rattigan$ python python_practice_sols.py
[4, 1, 3]
['r', 2, 'd', 2]
this|must|be|the|place
False
720
[3, 5, 5, 7, 7, 9]
3
False
heads
Shut the *****
(base) purple:homework0 rattigan$
```

## Grading

We will run each function in your program and examine the return values for correctness (note that we will be testing on different test cases than those found in `main()`). Your grade will be determined by how many of the exercises achieve the correct output, with partial credit being awarded wherever possible.

## What to Submit

You should submit:

- A modified `python_practice.py`
- A `readme.txt`, containing
  - Your name
  - A fun fact about yourself
  - Notes or warnings about what you got working, what is partially working, and what is broken