

HONR 490 – Homework SAMPLE

Justin A. Gould
gould29@purdue.edu

February 10, 2021

Homework Instructions

To receive credit for the assignment, do the following:

1. Create a .py file, and name it: `purduealias_honr490_homework_number.py`
(e.g., `gould29_honr490_homework_1.py`)
2. Create a function for each problem, accepting the input and providing the desired output
(both of which will be defined in the homework assignment).
(e.g., `def problem_1()` for Problem #1)
3. Submit the .py file to Brightspace by the due date.

For grading, I will leverage unit tests, to ensure you aren't hard-coding your work. These unit tests are hidden. To test your code, I suggest using a Jupyter Notebook to ensure you're following directions. An example .py file is on our Brightspace and GitHub.

Problem 1**Python Basics: Addition – 5 points**

Given a non-negative integer, add one to it.

Input: Any non-negative integer, n .

Desired Output: An integer, $n + 1$.

Problem 2**Python Basics: Sorting a List – 5 points**

Given a list of items, either strings or integers, sort the list (ascending).

Input: A list of items (strings or integers).

Desired Output: A sorted list (ascending).

Problem 3**Python Basics: Sorting a List – 10 points**

Given a float, round it to 3 digits.

Input: A float.

Desired Output: A float, rounded to 3 digits.