

There are 30 total points. 70+% correctness (21+ points) is needed to pass. Remember that you must pass all assignments to pass the class. The assignment is due at the beginning of class.

This document is available at <http://stanford.edu/~danfrank/cme193/homeworks/hw-1.pdf> and on Coursework. The starter code is available at <http://stanford.edu/~danfrank/cme193/homeworks/hw-1.py>.

Overview and grading

In this assignment, you are provided with three python files, and you are asked to implement functions in these files. The functions are designed to give you practice with control flow and basic arithmetic in Python. You will have to edit the Python files using a text editor. You are welcome to use an integrated development environment (IDE), for example, IPython or Eclipse with the PyDev add-on.

See the course website for submission and grading.

1. Preliminaries

Make sure that you understand the concepts from Homework 0. (0 points).

2. Arithmetic

Implement the functions `arith2()`, `arith3()`, and `arith4()` in the first section of `hw-1.py`. As an example, the function `arith1()` has already been implemented for you. (14 points).

3. Strings

Implement the functions `str2()`, `str3()`, and `str4()` in the file strings section of `hw-1.py`. As an example, the function `str1()` has already been implemented for you. Hint: the `len()` function may be useful for implementing `str4()`. See: <http://docs.python.org/2/library/functions.html#len>. (8 points).

4. Simple math functions

Implement the functions `seq_add()` and `fact()`. You are not allowed to use the Python math library. (8 points).