In class exercises for Class01 on 01.16.2019 John Serences (jserences@ucsd.edu)

Continue to use your notebook from the lecture, but please insert a text cell and a note to indicate where your problem set begins so that I can easily find your answers.

## Please also number your answers with a short comment like: #1a, 1b...3a...etc.

Do all work in your notebook, and make sure to run each cell of code before you move on.

- 1) Pick out your four favorite things to eat and put the names of the food in a list.
  - a) Use a 'for' loop to print out the name of each food
  - b) Now modify the print statement so that it prints out "Hi, my name is XX, and I really like YY" where XX is your name, and YY is the name of each of your favorite foods (so print out each food on a different line)
  - c) Print "I like all of these foods!" one time, after your loop finishes executing.
- 2) Write a 'for' loop to print the numbers from 0 to 10, exclusive
  - a) Then make the loop print the numbers from 0 to 10, inclusive
  - b) Use a <u>list comprehension</u> to make a new list to store the cube of each number in your list plus 2
  - c) Compute the sum, min, and max of the numbers in the new list
- 3) Make a <u>list</u> of the numbers from 0 to 30, exclusive. Think about how to make this list most efficiently you should not be typing in the numbers manually to your list.
  - a) Use slicing to print the first 5 numbers in the list
  - b) Then print the square of the even numbers
  - c) Then make another list of 30 numbers, also from 0-30 exclusive
  - d) Write two for loops, one inside the other, to print the product of each element in the first list with every element in the second list
- 4) Make a list of 3 names (or whatever you'd like). Use a 'for' loop to print the names in reverse order. Hint: use range(start, stop, step) to index into your list.