Homework 1

Due date: Thursday January 28 2019, 11:59pm

EXAMPLE: Write the whole homework using jupyter notebook, the examples below could look like the file snippet below

1. Example 1: Write a command that produces this list [7,8,9,10]
   Answer: range(7,11)

2. Example 2: Write a command that generates a list of squares:
   Answer: [xi*xi for xi in range(10)] or [xi**2 for xi in [1,4,3,2]] etc.

Your Name

1. Write a command that produces this list [7,8,9,10]

In [1]: `print range(7,11)`

`[7, 8, 9, 10]`

2. Write a command that generates a list of seven squares

In [2]: `print [xi*xi for xi in range(5,12)]`

`[25, 36, 49, 64, 81, 100, 121]`

ASSIGNMENT:
(Typing just the answer will not count as correct)

1. Write a command that produces this output `List:   2 4 6 8 10 12 16`

2. Write a command that produces this output `List:   201 191 181 171 161`

3. Combine two strings and print the three strings

4. Sum up 10 random number (look at our calculation of Pi for that) and present the result

5. Present a result for this calculation:
$$\sum_{k=1}^{K=\infty} \frac{1}{k}$$

   if course we cannot sum up an infinite number of values, show results where you sum over $K = 10, K = 1000, K = 10000$

Upload the homework to canvas (name the file with your lastname.ipynb