Homework 2

# Purpose:

The previous homework was more or less to get a good start at playing with Jupyter and getting started. This homework will be a bit more challenging and a bit more involved. This will help gauge your understanding of modules 1 and 2, together.

# Required Hand-in:

1 notebook is required, please do everything in one notebook. It may be a good idea to write your “rough draft” in another notebook, do testing, then move everything into a final document. The theme of a large part of this course is how well you’re writing code (clean code, well thought out names, etc). Please see the rubric for details. Please also ensure that you restart kernel and/or “run all” before sending. There should be no error messages presented. If you’re trying to demo something with error messages, then comment it out and explain the reason (either markdown or in line). Furthermore, please remember that the goal of this course is your understanding of Python. Meaning having questions and asking them is a really good idea. If you’re confused by something, add some parts in the notebook that asks (including commented out code). I intend on using these questions to have a Q&A during the Monday lecture.

# Homework:

Please note for each step below, it relies on the step above.

1. Please create a random list of 200 random integer values. Please seed this.
   * <https://docs.python.org/3/library/random.html>
2. Using a loop structure (while, for, etc.) please sum every 5 values. This should be stored in a list that has 40 elements. Have a block that outputs the value of this structure.
3. Convert the structure into a set
4. Using a lambda, filter out all elements that are even.
5. Using a lambda, convert each element as a string value.
6. Using a loop structure (while, for, etc.) create a dictionary that assigns the odds of your previous structure into the key, and the evens into the values. In the case the length of the elements from #4 are odd, then assign that key to an empty string (“”)