



Homework 1

Problem 1

Communication will be key throughout this course. Minor gaps or misunderstandings early on tend to snowball into mountains of misinformation later. To that end, you will have the tools and resources to mitigate questions you have through your peers and instructors.

For problem 1, sign up for the General Assembly Data Science Slack channel. Then, send one message to the “**General**” channel with: your name, industry/area of study, and an interesting fact about yourself.

In the future, use Slack to ask your peers questions and private messages to your instructors for more help.

Problem 2

Future homeworks will almost always be submitted through IPython Notebooks (<http://ipython.org/notebook.html>). IPython notebooks allow interactive histories as well as dynamic plots within a single .ipynb file. Let's begin with a simple submission!

- a) If you have not already, install the Anaconda distribution <https://www.continuum.io/downloads> (Python 2.7 version). The Anaconda distribution includes many of the packages required, as well as instances of IPython Notebook and Spyder, a full featured IDE.
- b) Create a new ipynb file in IPython Notebook and answer the following questions.
- c) Given: `list1 = ['a','b','c','d','e','f','g']` and `list2 = [1,6,10,2,4,1,9]`, create a dictionary with key value pairs of list1 and list2 respectively.
- d) Create a function that takes in a list of integers, iterates through them, and returns the total number of elements that are divisible by 3 or 5, but not both 3 and 5. (i.e. 6 would be counted, 10 would be counted, but 15 would not be counted). Test your function with the following list: `list1 = [1,5,3,7,11,15,6,7]`, which should return 3.
- e) Clean up the notebook, save, and submit this homework assignment to gadschicago@gmail.com with the subject [HW01 – YOURNAMEHERE], and attach the .ipynb file.