

## Homework Assignment 2

As with HW 1, please turn this assignment in as a jupyter notebook. This homework will be due next Wednesday.

Question 1 and it's subparts rely upon a dataset that is in the class github repo under assignments called `populations.txt`. Please be sure to update your version of the repo to get this small dataset

**Question 1:** Using numpy and matplotlib, import the `populations.txt` dataset. Next complete the following tasks: 1) describe the mean and standard deviation of each of the population sizes in the dataset. 2) write a function to find the species which is most abundant in each year. 3) plot the population sizes of hares, lynxes, and carrots as a function of time (i.e. x-axis will be year). Ideally your plot will use a different color for each species and will include a legend.

**Question 2:** Using pandas, import the insect egg database and try to do the following: Reproduce the plot of volume to aspect ratio (called `ar` in the column values) shown [here](#). See if you can color points according to length as done on that webpage.