## Project: Formal and Inductive Logic Using Python

## **Directions**

For this project, you can choose one of two options: the "basic" python python project (based on lecture 10 on Perusall), or the (somewhat more advanced) "Pandas" project (based on lecture 13 on Perusall). I'll also give you a small amount of extra credit if you do the both  $\mathfrak{S}$ .

**Citation:** You don't need to cite in-class material (from my notes or the lecture books). Any outside material must be cited appropriately.

Scoring (out of 20 points). Unless noted otherwise, each coding question is worth 2 points. The scoring is as follows:

- 2/2 The problem is complete and correct.
- 1/2 The problem is partially correct.
- 0/2 The problem is missing but incorrect.

## Option1: Python Programming With Google Colab (20 points total)

This is based on lecture 10 (available on Peruall). Open the following notebook: <a href="https://github.com/brendanpshea/intro">https://github.com/brendanpshea/intro</a> to python/blob/main/Python 01 Intro.ipynb

Complete all 10 of the exercises. Then download your completed notebook as an .ipnyb file with the filename **YourLastName\_Python.ipnyb**. Submit this to D2L.

## Option 2: Statistical Reasoning With Python and Pandas (20 points total)

This is based on lecture 13 (available on Peruall). Open the following notebook: <a href="https://github.com/brendanpshea/intro">https://github.com/brendanpshea/intro</a> to python/blob/main/Python 02 Statistical Reasoning With Python and Pandas.ipynb

Complete all 10 of the exercises. Then download your completed notebook as an .ipnyb file with the filename **YourLastName\_Pandas.ipnyb**. Submit this to D2L.