ST 563 Introduction to Statistical Learning

Homework 1 (Due: August 23 Midnight).

#1. Set up your own Jupyter environment. There are many options - your own laptop, Google Collab, Jupyter hub,… See text book section 2.3.1. Getting Started.

#2. Create a new ipynb file and name it HW1.ipynb

#3. Read Section 2.
        Q1) What are the packages the book introduces. How many?
        Q2) What is the purpose/use of each of these packages?
        Q3) What is the "rng" in the code chunk In[99], and why do we use such a thing?
        Q4) If you are a skillful Python programmer:
            explain how you are skillful and your Python background.
        If you are not:
            Type out and run all the codes in Section 2.3.4 to 2.3.7.
            The data in the book : https://islp.readthedocs.io/en/latest/data.html
            Or you can import their data library through Python
            (See, In [4] in Section 3.6, from ISLP import load_data…)

        Q5) If you are an R user, how is python different from R based on your experience?
            If you are not: just state that you don't know R.

#4. Set up your GitHub for the class.
        1. Make your account if you don't have one.
        2. Make a private project named as NCSU_ST563_2025_fall
        3. Share it with the instructor (id: JungeumKim) and TA (id: xxx)

        IMPORTANT: Use free general GitHub, not NCSU enterprise

#5. Upload your homework as NCSU_ST593_2025_fall/homework/HW1.ipynb by the due date.

Note: #3 Q4-5) is not allowed to get a help from generative AI.