STAT 587   **HOMEWORK # 1**   Winter 2026

DATA SCIENCE I

DUE DATE: <mark>**January 21, 11:59 pm**</mark>

<mark>**Instructions**</mark>**:**
- *Please show all the work with proper mathematical/statistical notation and logical flow to receive full points.*
- *You are allowed to use **Python** or a Scientific Calculator where required.*
- *Submit only **one** **PDF** on CANVAS.*

Questions here are taken from the Exercises pages in the books:
- Introduction to Statistical Learning with Applications in Python - Chapter 3 (**pages 130; 132 – 133**)
- The Elements of Statistical Learning – Chapter 3 (**page 96**)

ISLP

1. Exercise 10

2. Exercise 14

3. Exercise 15 (a, b, d)

ESL

1. Ex. 3.17 (skip PCR, PLS)