**Homework #1  
Problem #4  
Timothy Tsai  
332003717**

*I certify that I have personally done the coding, generated the figures and written the report without aid from anybody else, and that I have not plagiarized, self-plagiarized, or used AI-generated text. I certify that I have acknowledged any sources I used to complete this assignment*. TT.

# Part 1: Insert a descriptive title for this part