

Statistics (114 Fall): Assignment 1

You will have **one week** to work on this assignment. The total score for this assignment is 100. Please follow the guide and answer each question correctly. If you have any questions, please don't hesitate to contact me. A good answer is always succinct and complete. In this assignment, you are required to do three things:

1. Based on the **R** codes we learnt during the class for the self-made function **add**, you are required to make another self-made function **multiply**—this function **multiply** will multiply any two entered numbers and return the results.

a. Please copy and paste you **R** code for the function **multiply** here. (25%)

b. Please calculate 238×621 through the function **multiply** and write down the reported result. (25%)

2. Based on the **R** codes we learnt during the class for the self-made function **permut**, you are required to make another self-made function **combinat**—this function **combinat** will calculate the number of possible outcomes for taking r elements from n objects (order does not matter).

a. Please copy and paste you **R** code for the function **combinat** here. (25%)

b. Please calculate the number of possible outcomes for randomly picking 8 balls from 50 balls in a box through the function **combinat** and write down the reported result. (25%)