**Lab 1: Exploring Numbers, Strings, and Lists**

**Week 2 (1/29/2025)**

**Objective:**  
This assignment introduces students to working with Python data types such as numbers, strings, and lists. The focus is on applying basic operations, string manipulations, and list handling techniques.

**Instructions:**

1. **Programming Tasks:**  
   Create a Python program named Assignment1.py that includes the following tasks:

**A. Numbers**

Perform the following calculations and print the results:

* 1. Multiply two numbers and divide the result by another number.
  2. Find the remainder when one number is divided by another (modulus).
  3. Calculate the square and cube of a number (using both \*\* and a built-in function like pow() for practice).

**B. Strings**

* 1. Create a string variable that stores your full name and print it.
  2. Extract and print the first name and last name separately (use string slicing or splitting).
  3. Convert the string to all uppercase and lowercase, and print the results.
  4. Reverse your name and print the reversed string.

**C. Lists**

* 1. Create a list of at least five of your favorite foods.
  2. Print the first and last item in the list.
  3. Add two more items to the list and print the updated list.
  4. Remove one item (by value or index) and print the final list.
  5. Sort the list alphabetically and print it.

**Submission Instructions:**

1. Save your program as Assignment1.py.
2. Compress the file into a .zip file named <CWID>\_<LastName>.zip (replace <CWID> with your campus-wide ID and <LastName> with your last name).
3. Submit the .zip file on Canvas by the deadline.