**Laboratory 2**

**Laboratory Objectives**

1. Write a Python program using:
   * Lists
   * Loops
   * Conditional statements
   * Input/output
   * Modules
   * Functions
2. Run and test a Python program.

**Program Instructions**

**1. Implement a Tuffy Titan Contact List**

* The program should maintain a list of contacts that can be modified or deleted.

**2. Create a contacts module**

* File: contacts.py
* Requirements:
  1. Add a comment at the top with your name, date, and purpose of the file.
  2. The contact list format: [["first name", "last name"], ["first name", "last name"], ...]

**Functions in contacts.py**

1. print\_list(contacts):
   * Prints the contact list in a formatted manner.
   * Displays index, first name, and last name.
2. add\_contact(contacts):
   * Prompts the user for a first and last name.
   * Adds the contact to the list and returns the updated list.
3. modify\_contact(contacts):
   * Prompts the user for an index to modify.
   * If the index is invalid, prints Invalid index number. and returns the unedited list.
   * Updates the contact information and returns the updated list.
4. delete\_contact(contacts):
   * Prompts the user for an index to delete.
   * If the index is invalid, prints Invalid index number. and returns the unedited list.
   * Removes the contact and returns the updated list.

**3. Create a main driver program**

* File: main.py
* Requirements:
  1. Import the contacts module.
  2. Define a variable for the contact list.
  3. Implement a menu loop with the following options:
     + Print list
     + Add contact
     + Modify contact
     + Delete contact
     + Exit the program
  4. Prompt the user for a menu choice and call the appropriate function.

**4. Run the program**

Execute the following command:

python3 -m main

**5. Example Output**

\*\*\* TUFFY TITAN CONTACT MAIN MENU

1. Print list

2. Add contact

3. Modify contact

4. Delete contact

5. Exit the program

Enter menu choice: 2

Enter first name: Richard

Enter last name: Stallman

\*\*\* TUFFY TITAN CONTACT MAIN MENU

1. Print list

2. Add contact

3. Modify contact

4. Delete contact

5. Exit the program

Enter menu choice: 1

================== CONTACT LIST ==================

Index First Name Last Name

====== ==================== ====================

0 Richard Stallman

**Submission Instructions:**

1. Save your folder named as <CWID>\_<LastName>\_lab2.zip (replace <CWID> with your campus-wide ID and <LastName> with your last name).
2. It should contain contacts.py, main.py and add screenshot of output.
3. Submit the .zip file on Canvas by the deadline.