CSCI 161 Lab Assignment 4   Points 10

Objective:

To work with string slicing, lists, and creating basic function in python.

Assignment:
Create menu function and print out the following options using while loop. Exit from the program when user enters option 5. The functions performed by each option is given below:

Option 1: Ask the user to input a string "CSCI161L" and assign it to a variable. Use string operations to print the following: "CSCI", "161", and reverse version of the string ("L161ICSC") using string slicing.

Option 2: Ask the user to input a string and assign it to a variable and check whether it is palindrome using string slicing.

Option 3: Create a list which consists of 5 integers or input 5 integers from users and assign to a list separated by comma and print out their squares using any loop.

Option 4: Exit from the program.

Sample output:

Menu:
        Option 1: String Operation 1
        Option 2: String Operation 2
        Option 3: List Operation 1
        Option 4: Exit

Please enter an option: 1

Please enter a string: CSCI161L
Output   >>   String 1: CSCI
                String 2: 161
                Reversed string: L161ICSC

Menu:
        Option 1: String Operation 1
        Option 2: String Operation 2
        Option 3: List Operation 1
        Option 4: Exit

Please enter an option: 2

Please enter a string: abba
Output   >>   String is palindrome.

 Menu:
        Option 1: String Operation 1
        Option 2: String Operation 2
        Option 3: List Operation 1
        Option 4: Exit

Please enter an option: 3

Enter a list of 5 integers.
6,3,4,12,10

Output   >>   Square of numbers in the list are: [36, 9, 16, 144, 100]

Menu:
        Option 1: String Operation 1
        Option 2: String Operation 2
        Option 3: List Operation 1
        Option 4: Exit

Please enter an option: 4

Exit from the program!

```
C:\Users\aydan\Desktop>python leetcode.py
Select option
 1. String slicing 1
 2. String slicing 2
 3. List 1
 4. Exit
1
[1, 4, 9, 16, 25, 36, 49]
None

C:\Users\aydan\Desktop>python leetcode.py
Select option
 1. String slicing 1
 2. String slicing 2
 3. List 1
 4. Exit
2
CSCI 161ICSC 161
None

C:\Users\aydan\Desktop>python leetcode.py
Select option
 1. String slicing 1
 2. String slicing 2
 3. List 1
 4. Exit
3
('CSCI', 'is not a palindrome')

C:\Users\aydan\Desktop>python leetcode.py
Select option
 1. String slicing 1
 2. String slicing 2
 3. List 1
 4. Exit
4

C:\Users\aydan\Desktop>
```

Instructions:

- Preferred programming environment:

    - OS   : Linux (Mint)
    - Interpreter   : Python 3 (not Python 2)
    - Editor   : gedit or editor of your choice

- The program is saved as a file with .py extension.

- The program should include a comment block at the top with your name, course number and course section, assignment number

For example:

 # Your name
 # CSCI II 161 L01/L02
 # Assignment 4

- Upload your file as your **lastname_firstname_assignmentnumber.py**
  For example:

  lastname_firstname_4.py