CST8102-15W Lab10 **Name:_____ Section#: _____**

Linux Shell Scripting III

Due date

- End of Week13 lab class

Evaluation

3% of final grade.

Submission

- Show execution of your script to your professor, or hand in or email (in email subject line: CST8102-15W lab10 submission) completed lab before due date.

Materials

- Student laptop computer
- Ubuntu 14.04.1 installed in VMWare Workstation

Procedure

You will create a script file to perform basic calculations.

1. Create a script file called ***mycalc*** using **vim**.
2. The first line of your script file should force the use of the **bash** shell.
3. On the top of the script file, there should be **a section of comments** that contains the Assignment number, your name, student number, lab section number, name of the script file, the date, and a description of what the script file does.
4. Your script file should be **properly commented**
5. The script file should perform the following operations: **+** and **–**

6. The script should have two **functions**:
    a. **add** and **subtract**
    b. Each of the functions should accept two integer numbers as parameters
    c. The functions should perform the desired calculation.

7. The script file should support two ways of functioning, no parameters or three parameters.

    a. If three parameters are provided, the second parameter must be **+** or **–** :

        - The First and Third parameters must be numbers.
        - The user can enter integer numbers only.
        - The result should be displayed on the screen and the program exit.
        - The example below shows how plus would work. Do similar for -
        - Example:

```
mycalc 12 + 3
The sum of 12 plus 3 equals 15
```

    b. If no parameters are provided the script should do the following:

        - A menu should be provided allowing the user to exit or Do a calculation. Allow upper or lower case. See **Menu 1** below.
        - If C is selected the screen should clear and the user should be prompted to enter a number. See **Menu 2** below.
        - If a number is entered the screen should clear and a new menu should be displayed. See **Menu 3** below.
        - If **+** or **-** is entered the screen should clear and the user should be prompted to enter a number. See **Menu 2** below.
        - If a number was entered the result should be shown on the screen
        - After three seconds the screen should clear and **Menu 1** should be displayed again.

    c. Error checking should be done to make sure of the following:

        - Either no parameters or three parameters are entered.
        - If three parameters are entered then the second parameter must be one of the following + -
        - Any invalid choices should be flagged in the menu system
        - You don't need to check if the input numbers are integers

Menu 1	**Menu 2**	**Menu3**
C) Calculation	Please enter an integer number or **X** to exit:	+) Add
X) Exit		-) Subtract
		X) Exit