

**CIS241 Fall 2018 – Lab 5: Linux Shell Script**  
**Maximum Points: 100 (2% of the final grade)**  
**Due at 10PM on Wednesday, November 14, 2018**

In this lab, you need to write a Linux Shell Script to finish the following tasks. Please write the codes of all the required tasks (Task 1, 2 and 3) into one single script file and name it as ***test.sh***.

**Task 1:** The ***test.sh*** shell script supports only one command line argument, ***-c***, ***-l***, or ***--help***, e.g., ***./test.sh -c***, ***./test.sh -l***, or ***./test.sh --help***.

If no command line argument is provided, (i.e., ***./test.sh*** is typed), it displays “Must provide an argument” and exits.

If the argument is ***-c***, (i.e., ***./test.sh -c***), it displays “The number of files” and “How many bytes”.

If the argument is ***-l***, (i.e., ***./test.sh -l***), it displays “List all the files”.

If the argument is ***--help***, (i.e., ***./test --help***), it displays “How to run this script”.

**Task 2:** Create a directory ***backup*** in your home directory in EOS machine. (If ***backup*** does not exist, then create that. Otherwise, do nothing.)

**Task 3:** Count the number of files and directories in the current path, and display that. Also, display the amount of bytes these files and directories consume.

**Task 4:** (Optional) For this optional task, write a Linux Shell Script ***sum.sh*** to calculate the sum of command-line arguments, and display that. We can assume all the command line arguments are integers. The number of command-line arguments is unknown. (You do not need to submit the code for this task.)

**After you finish all the required tasks (Task 1, 2 and 3), please show your program to the instructor. If you cannot finish that in the lab time, please submit the Linux Shell Script ***test.sh*** to BlackBoard.**