

**York University**  
**Lassonde School of Engineering**  
**Dept. of Electrical Engineering and Computer Science**  
**EECS 2031**  
**Software Tools**  
**Winter 2017**

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<b>EECS2031</b>	<b>Lab Test 3</b>	<b>Software Tools</b>
Thursday, Mar. 30 <sup>th</sup> , 2016		6:00– 8:00pm

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**Question 1**

Write a shell script named “CatBig.sh” that accepts 2 or more parameters

**CatBig.sh    size    file1    file2    file3 ....**

The program considers the files file1 file2 ... if the size of the file is greater than or equal to **size** in bytes, it concatenates the file to the output (cat the file). For example:

**CatBig.sh    300    sum.c    dat.txt    help.v**

There is no need to check for size, it is guaranteed to be integer.

If there are no files (only size in the command line) the program displays

**No files to cat**    then it quits

Else, it cats the files one by one.

Submit as

**submit 2031 LT3A1 CatBig.sh**

**NOTE:** If you use `wc -c` to get the number of characters in the file, keep in mind that “`wc -c`” produces two things, the number of characters and the file name. You have to separate them if you want to use the file. Or, you have to pipeline the file into `wc` to avoid the filename in the output.

**Question 2**

Write a shell script to calculate  $\sum_{i=0}^N i$

The script name is sum.sh and it runs as follows

**sum.sh N** (where N is an integer)  
it displays the sum

**submit 2031 LT3A2 sum.sh**

**Question 3**

Consider a file with the following information

Last\_name First\_name Course\_number midterm labs final

For example

**Smith, John EECS2031 70 80 90**

This file is called Ras.txt

Write a shell script (stud.sh) that runs as follows

**stud.sh flag arg1 arg2**

The flags and their actions are described here

Flag	arg1	arg2	Action
-G	last name	first name	Calculate the student final mark in the course (the average of the three components, taken as an integer)
-R	Course	-----	Display the names of the students who are registered in this course. The name is displayed as shown in the file Ras.txt, last name and first name
-C	Course	----	Display the number of students registered in the course

**submit 2031 LT3A3 stud.sh**

### **Hints**

Some Linux commands. Please use man to see what they do

cat, less, more, tail, head, sleep, cut, ls, find