

## Bash Programming

### Lab C

The labs, for this course, are designed to be completed on your own at home or in the 3<sup>rd</sup> floor Trottier labs. These labs are not graded. You do not hand in these labs. If you prefer to work on a lab with your TA tutorial group, then check the schedule for your TA's tutorial session. You will find this schedule in our MyCourses page under Content/Course Information/TA Information. Since the university has limited lab space, your TA might ask you to bring your laptop and work in a classroom instead of a lab.

This lab is about programming in Bash.

Some labs will have a question zero. These questions will not be covered by the TA during the tutorial. It is extra content meant for you to do on your own.

#### QUESTION ZERO: Optional problem

The following are great links that will help you learn to program in Bash:

- Introduction: [https://linuxhint.com/30\\_bash\\_script\\_examples/](https://linuxhint.com/30_bash_script_examples/)
- Intermediate: <http://matt.might.net/articles/bash-by-example/>
- Some advanced: <https://www.macs.hw.ac.uk/~hwloidl/Courses/LinuxIntro/x945.html>

#### QUESTION ONE: Try to write some scripts

From the web links from Question Zero, copy and run the following programs from the "some advanced" link <https://www.macs.hw.ac.uk/~hwloidl/Courses/LinuxIntro/x945.html> :

I suggest the following:

**Version 1: Explicit For loop**

**Version 2: Using a Shell Function**

#### QUESTION TWO: Write your own script

Modify **Version 2: Using a Shell Function** to return, properly, the value from `count_lines()`. Look at our class notes to see ways we can return values from functions. Write two versions of this script. In each version try a different way to return a value.