# Lab 3 Instructions

Rob Hackman

Winter 2025

University of Alberta

## **Produce Outputs**

For this lab you will be creating a bash script that will be helpful for creating test cases from sample executables! Also, this script will share lots of similarities with your assignment scripts, so if you haven't completed your assignment already then completing

#### Version 1

Build a script called produceOutputs which expects two command line arguments, the first is a program to execute and the second is a test set file as described in assignment 1.

Unlike the test set files described in assignment 1 there will not be any output (.out) files yet, only input (.in) and argument (.args) files. The purpose of the produceOutputs script is to generate the .out files, for this reason the executable provided to it should be the working executable (like the sample executables provided to you with assignments).

3

#### Version 1

Create the produceOutputs script so that it executes the given program on every test named in the test set file provided. It should run each test redirecting input from the given .in file and providing the arguments from the .args file, it should redirect the output of each of these runs to the corresponding .out file

Your script should also produce a usage message and exit when not given two command line arguments.

If you are having trouble getting started, consider the example subshell\_for.sh from class. What happens if you replace the filename alice.txt with your test set file? How could this help you?

#### Version 2

Update your produceOutputs script so that it considers that some test cases will only have .in files, some test cases will only have .args files, and some test cases will have both.

For each given stem, your script should check if both a .args file and .in file exist, if they do then your script should run the test case with both. If they do not both exist your script should determine if only .args exists and then run the test case with only providing arguments. If only .in exists then your script should run the test case only redirecting input. You do not need to worry about the case where neither .in or .args exists.

5

### Version 2 - Hint for test cases!

Try running your script with a test set file, or program, whose name contains a space! Does your script work? How can it be fixed?