

CS 2204 Lab 9

your name here (please print):

your student ID number here:

Create a subdirectory called `lab9` under your home directory. Perform any necessary work for this lab assignment in that directory. Ensure that this assignment is performed from within a `bash` shell.

1. (0 points) Understand how your `bash` `PATH` variable is initialized. Then update `PATH` to include the `lab9` sub-directory so that, when you type commands henceforth, Linux knows to also search within this directory (see lecture notes of Oct 24 for more information).
2. (3 points) Understand how your Linux prompt is setup by your default `bash` shell. Then change the prompt to something of your liking (e.g., you can put information about your name, history of commands, time etc. in your prompt). Give the command below.
3. (2 points) Understand what the command `expr` does. Then write a `bash` script called `interactive-product` to read in two numbers, one at a time, and then print their product. This script should work as follows:

```
your prompt here>interactive-product
Please enter the first number:
3
Please enter the second number:
7
The product is 21.
```

Write your script on the right side of this page.

4. (5 points) Write a bash script called `counter` that takes a pattern as input, finds filenames in the current directory that satisfy that pattern, adds up their sizes, and prints the result. For example (recall that the quotes below are important, without them the shell will expand the pattern itself; we want the argument to be passed unexpanded to `counter`):

```
your prompt here>counter "*.dat"
45
```

Presumably, 45 is the total sum of the sizes of files matching `*.dat`. Write your script here.

5. (**Extra Credit:** 2 points) Write a script called `ego` that prints itself. *Hint:* Model it after the script discussed in class on Monday that deletes itself. Whereas `self-terminate` used `rm` to achieve the effect, you must use a different UNIX command (something to do with printing) on the first line of `ego`.