CS 374 Lab 2: Questions

1. **Work in small groups.** Each person in your group should clearly type their name here:

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1. Under your work for section 4, you ran the program normally, then you ran it in the background by using “myprog &” or “./myprog &” to effect this. *Did the behavior change at all? What did you have to do to see output?*
2. Draw a picture of the call tree for the processes involved. Note that while your programs run you can do “ps -al” to see the process IDs—this is why I had you use sleep. Note that since you have a command line interpreter it is possible to do more than one command on a line. For example, “myprog & ; ps -al” is a valid input line. You need enough time delay so that the child processes have started, but not so long that your programs quit. If you don’t catch the call tree the first try, think about whether you were too early or too late, and how to change that.

The drawing canvas below is provided to help you more quickly draw your diagram. It is not accurate relative to your calls!

**Example Call Tree Style (your tree will differ):**

programX (PID = 2339)

programY (PID = 2340)

programAA (PID = 2350)

programZ (PID = 2348)

Note: the drawing canvas has text boxes connected with arrows. It’s pretty simple.

**Continued on back!**

1. If you wanted to write a program which generated a new process, how confident are you that you could use fork() and exec() to accomplish this? Answer on a scale of 1-5 for each member of the group, where 5 is *very confident*, and 1 is *impossible*.