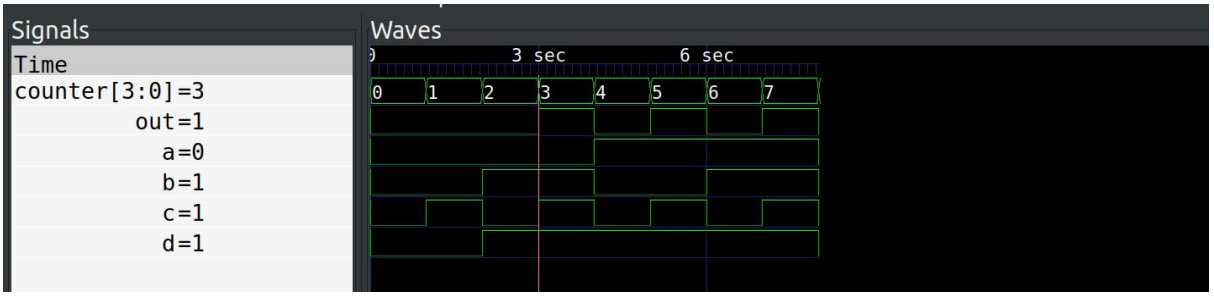
1. [10 points] Suppose I have a command line open at a directory named foo. This directory contains a subdirectory named bar. What command or sequence of commands could I issue on your system to find out what files are contained within the subdirectory bar, such that after the command or sequence of commands is executed, foo is the current directory as it was before the commands were executed?

Sequence of commands:
pwd // check current directory is ‘foo’
ls // check subdirectory ‘bar’ exists
cd bar // change current directory to ‘bar’
ls // list contents of directory ‘bar’
cd foo // change back to directory ‘foo’
pwd // check if present working directory is ‘foo’ (as it was to begin with)

2. [10 points] Include a screenshot of the simulated circuit behavior displayed in GTKWave, showing waveforms for all inputs and outputs of circuit under test for the entire duration of the simulation. In particular, counter[3:0] and out should be displayed in the viewer. Additionally, include the waveform for the internal wire d. In the screenshot, place a marker at a location such that the “Signals” pane shows the values of all the signals when the inputs were a = 0, b = 1, c = 1. Is the output of the circuit what you expect?



Included inputs a,b,c,d (as question stated ‘inputs and outputs of circuit under test’). Marker placed at t= 3s where a=0,b=1,c=1. Omitted wire f as this is simply the same as ‘out’.

3. [5 points] How long did the entire simulation run in simulated time?
8 seconds of simulated time

4. [5 points] How much time did you spend on this lab assignment, including time spent installing software?
1.5 hours