Lab 7: Boolean Formulas and Introductory Circuits

Due Wednesday, August 12 at 11:59 PM

Goals for This Lab

By the time you have completed this work, you should be able to:

- Write out truth tables corresponding to Boolean formulas
- Convert Boolean formulas to circuits
- Convert circuits to Boolean formulas

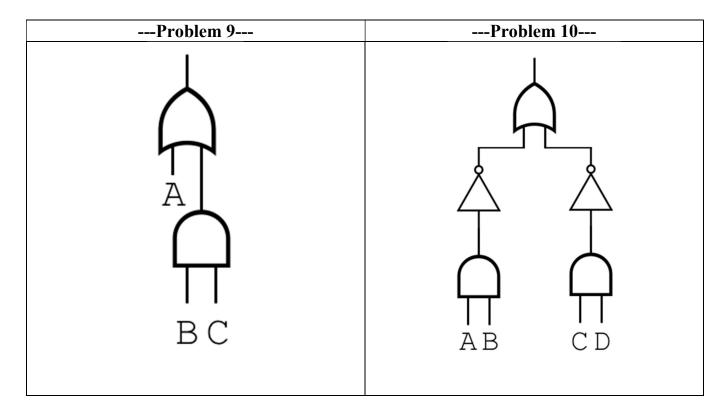
Provided files:

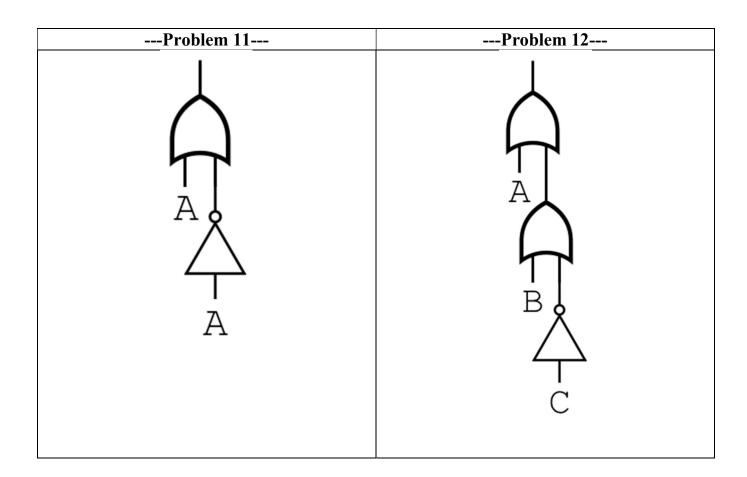
- lab7problems.txt
- collaborators.txt

Step 1: Edit the lab7problems.txt File

Using a text editor of your choice, open the <u>lab7problems.txt</u> file. The file contains a series of questions for you to answer. The answers should be placed directly in the file itself, except where noted. All questions must be answered correctly for full credit. Make sure you save your answers before you exit.

Problems 9-12 in <u>lab7problems.txt</u> require you to convert circuits to Boolean formulas. These circuits are listed below:





Step 2: Turn in Your Answers Using Canvas

Log into <u>Canvas</u>, and go to the COMP 122L class. Click "Assignments" on the left pane, then click "Lab 7". From here, you can submit the following files:

- lab7problems.txt
- collaborators.txt, if you're working with anyone else. Each person you're working with should be listed in the file, with one person per line.
- Image files corresponding to the circuits you drew for questions 5-8. These can be submitted as one image or as multiple images. The image file format should be one of:
 - o .png
 - o .jpg
 - o .gif
 - o .pdf

Be sure that the filename or the image itself makes it clear which problem you're solving.

You can turn in the assignment multiple times, but only the last version you submitted will be graded.