Name:

Submit your quiz by depositing your work in the directory:

/data/courses/ece\_1111/current/quizzes/qu\_03/lastname\_firstname/

You must create this directory, using your specific name in all lowercase characters with no spaces, and you must set your permissions so that only you can view the directory (and root of course).

Write a C program, named myprog.cc, that converts the command line arguments to a binary coded decimal. Assume we always specify 4 bits on the command line. The following examples should work:

myprog.exe 1 1 1 1

1111 = 15

myprog.exe 0 0 0 0

0000 = 0

myprog.exe 0 1 1 1

0111 = 7

myprog.exe 0 1 0 1

0101 = 5

Your output must be exactly as shown above. Your code only needs to handle positive values (no need to worry about 2’s complement representations.)

To print the command line arguments as shown above, here is a hint:

fprintf(stdout, “%c%c%c%c”, argv[1][0], argv[2][0], argv[3][0], argv[4][0]);

Also create an Excel spreadsheet, named p01.xlsx, that does the same calculation. Show that your results in C and Excel match exactly.

You need to use a make file, a header file, etc. Note that your code must be well-commented and well-formatted. You will be graded on the accuracy and aesthetics (formatting and commenting) of your code as well as the accuracy of your solution.

Using rapid-prototyping tools such as MATLAB or Excel is one of the most common ways we debug code.