COP4338

Fall 2016

Caryl Rahn

Lab 2

Write a C program for a mini calculator using only the command line options. You must use getopt to parse the command line.

Usage: minicalc [-a num] [-d num] [-m num] [-s num] [-e] value

* The variable value is the starting value.
* Input should be validated to be positive integers no more than 99.
* -a adds num to value.
* -d divides value by num.
* -m multiplies value by num.
* -s subtracts num from value.
* -e doubles value.
* Output should have only 2 decimal places.
* If –e is included, it is executed first.
* Use standard order of operations for the other operations.

Use the following samples for your output screenshot. I will use more than this though.

* minicalc –a 10 50
* minicalc –e 99
* minicalc –e 500
* minicalc –d 2 99
* minicalc –m 2 45
* minicalc –a 3 –s 3 5
* minicalc –a 2 –m 200 1
* minicalc –m 3 –a 50 10

The source file should have your name & PantherID included in it and it should have the affirmation of originality.

Code should be nicely indented and commented.

Create a simple Makefile to compile your program into an executable called minicalc.

Submit this assignment in Moodle. You should submit the source code, your Makefile and a screenshot of the output file compressed into a zip file named lab2.zip. The source file name should be minicalc.c or lab2.c and the screenshot should be named with your name. The Makefile should be called Makefile with no extension. I should be able to type make at the command line to compile your program. Do not include any other files or folders in the zipfile. This applies even if you are a Mac user.

Due 9/19/16