Sample Assignment
CMPS 101
Dr. Strange

Introduction

In this assignment you will be writing a simple calculator application. It receives as input the operation to perform (addition, subtraction, or multiplication) as well as two integers. Then it prints out the result of the calculation.

Sample Runs

```
Welcome to the calculator.
What operation would you like to perform?
     (a)ddition
     (s)ubtraction
     (m)ultiplication
a
Enter first number: 7
Enter second number: 4
The sum is 11
```

```
Welcome to the calculator.
What operation would you like to perform?
     (a)ddition
     (s)ubtraction
     (m)ultiplication
s
Enter first number: 6
Enter second number: 3
The difference is 3
```

```
Welcome to the calculator.
What operation would you like to perform?
     (a)ddition
     (s)ubtraction
     (m)ultiplication
m
Enter first number: 10
Enter second number: 20
The product is 200
```

Grading

Your program will be graded based on its *functionality* and *code style*. The functionality will be assessed based on your program's performance under a variety of testcases. The code style will be assessed based on a TA's review of your code's proper use of indentation, variable naming, and comments.

Submission Instructions

You should do your work inside a file name calculator.c. You will need to write the entire program, including the main.

You will submit your program on Gradescope. When you submit, submit only calculator.c. The autograder will automatically grade your submission and give you a score. The score from the autograder is your score for the functionality portion of the homework. No partial credit for functionality will be assigned based on a manual review of your code. It is important to note that the autograder requires your output to exactly match ours. That means that you need to ensure your print statements are identical to those found in the sample runs above.

Academic Honesty

This is an individual Homework, meaning that you should work on it alone. All code turned in by a student must be written by that student. Copying code found on the internet or using code from other students is strictly prohibited. Students are permitted to discuss the homework together, but must not look at each other's code under any circumstances. If you need someone to look at your code and help you, you should meet with one of the course staff. A sophisticated plagiarism-checking tool will be used to compare your solutions against all other student submissions as well as code from the Internet. If code is found to have been shared between students, all students involved will be penalized, including the student who actually wrote the code.

Students found to have violated this honesty policy will receive a 0 on the project and may be reported to the Vice President for Student Affairs. Repeat offenders will receive a 0 in the course and will be reported to the Vice President for Student Affairs.

Remember:

- If you are **copying code from the Internet** into your solution, you are committing academic dishonesty.
- If you **look at another student's code**, you are committing academic dishonesty.
- If you **allow another student to look at your code**, you are committing academic dishonesty.