

s202018021_04-02-ex3

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1. Instruction to compile the code

After using the `cd` (change directory) command to navigate to the correct working directory, use these following commands to compile the code:

```
% gcc -Wall -c 04-02-SC-BasicFunctions.c
% gcc -Wall -c 04-02-SC-ExtraFunctions.c
% gcc -Wall -c 04-02-SC-Main.c
% gcc -Wall -o 04-02-SC-Go 04-02-SC-Main.o 04-02-SC-BasicFunctions.o 04-
02-SC-ExtraFunctions.o
% ./04-02-SC-Go
```

2. Brief review of the code

In order to extend the functionality of our simple calculator, we can add the logarithm and exponentiation logic to `04-02-SC-ExtraFunctions.c`, and link the corresponding functions to `04-02-SC-Main.c` through the header file `04-02-SC.h`.

3. Result of execution

```
% gcc -Wall -c 04-02-SC-BasicFunctions.c
% gcc -Wall -c 04-02-SC-ExtraFunctions.c
% gcc -Wall -c 04-02-SC-Main.c
% gcc -Wall -o 04-02-SC-Go 04-02-SC-Main.o 04-02-SC-BasicFunctions.o 04-
02-SC-ExtraFunctions.o

% ./04-02-SC-Go
1 + 5
1 + 5 = 6
2 * 1.5
2 * 1.5 = 3
9 log 3
9 log 3 = 0.5
1 log 0
Invalid input! Logarithm result undefined.
1 log 0 = 0
2 exp 3
2 exp 3 = 8
2 exp 2.5
2 exp 2.5 = 5.65685
```

4. Explanation for extra files

N/A