

Assignment 1 – Command Line Arguments

Description:

This assignment is to write a C program that accepts arguments via the command line and then displays each of those arguments to the terminal along with how many arguments there are.

Approach:

This assignment was relatively straightforward but contains very specific instructions on how to complete the assignment. The general approach was simply to follow the steps provided in the README to ensure that the submission complies with the provided instructions.

First was to ensure that the file naming convention is adhered to. I created the .c file using the given naming format and created a snippet macro in VS Code to make sure that each file contains the given standard header for each source file in the future.

Next was to update the Makefile. Since we went over this in class, all we had to do was to update our names.

Since the assignment requires us to “display the number of arguments” and “list each one,” I decided to use the standard `argc`, `argv` declaration for the `main` function. This will allow me to easily display the number of the arguments provided and create a loop to display them.

Issues and Resolutions:

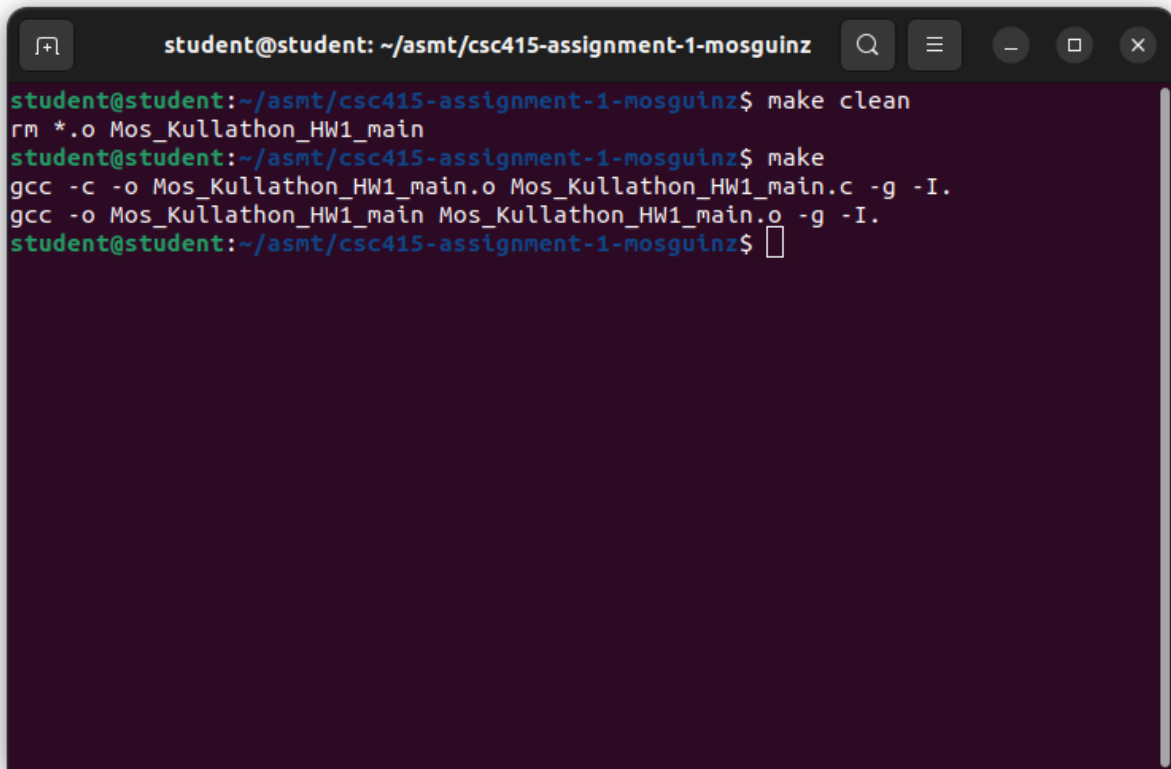
Issue one: I ran into an issue where I couldn’t build the file itself. I found out it was because the name I provided in the Makefile contains uppercase letters, but my name on the source file was lowercase. I simply fixed this by changing the name of the source file to match the casing in the Makefile.

Issue two: I kept forgetting to terminate the print statements with a newline character. I fixed it by simply adding “\n” at the end of each `printf` call.

Analysis:

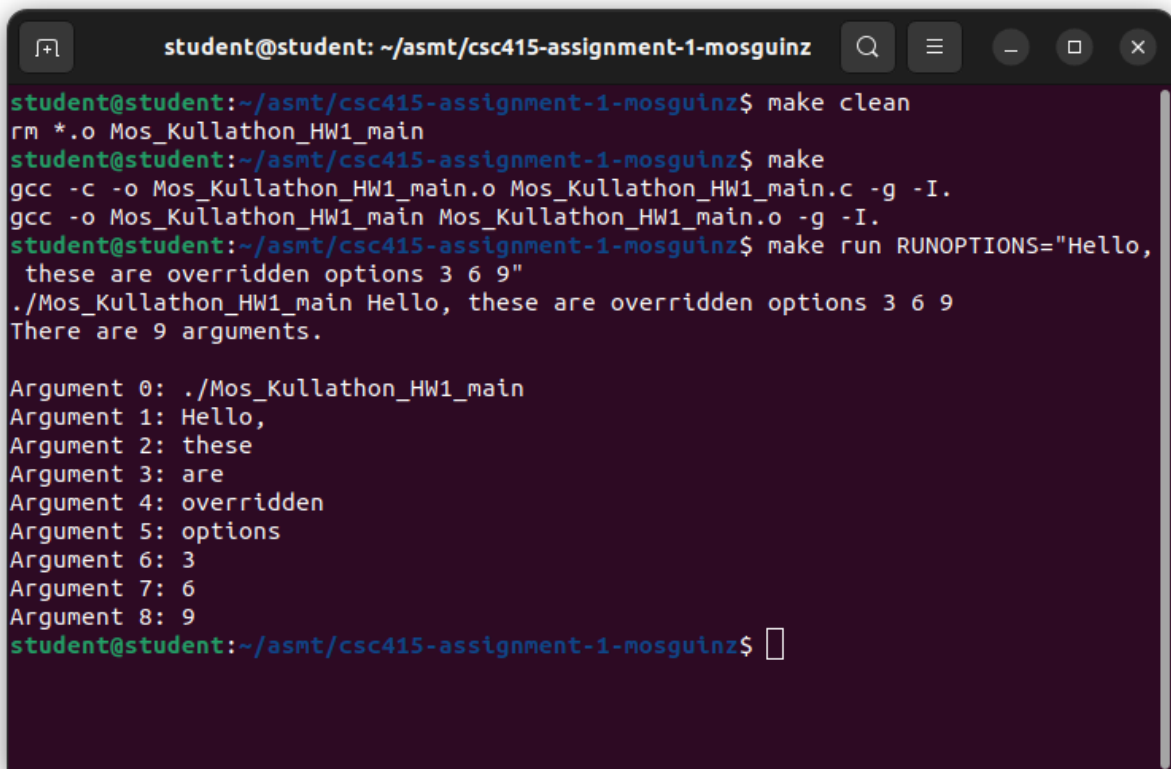
N/A

Screen shot of compilation:



```
student@student: ~/asmt/csc415-assignment-1-mosguinz
student@student:~/asmt/csc415-assignment-1-mosguinz$ make clean
rm *.o Mos_Kullathon_HW1_main
student@student:~/asmt/csc415-assignment-1-mosguinz$ make
gcc -c -o Mos_Kullathon_HW1_main.o Mos_Kullathon_HW1_main.c -g -I.
gcc -o Mos_Kullathon_HW1_main Mos_Kullathon_HW1_main.o -g -I.
student@student:~/asmt/csc415-assignment-1-mosguinz$
```

Screen shot(s) of the execution of the program:



```
student@student: ~/asmt/csc415-assignment-1-mosguinz
student@student:~/asmt/csc415-assignment-1-mosguinz$ make clean
rm *.o Mos_Kullathon_HW1_main
student@student:~/asmt/csc415-assignment-1-mosguinz$ make
gcc -c -o Mos_Kullathon_HW1_main.o Mos_Kullathon_HW1_main.c -g -I.
gcc -o Mos_Kullathon_HW1_main Mos_Kullathon_HW1_main.o -g -I.
student@student:~/asmt/csc415-assignment-1-mosguinz$ make run RUNOPTIONS="Hello,
these are overridden options 3 6 9"
./Mos_Kullathon_HW1_main Hello, these are overridden options 3 6 9
There are 9 arguments.

Argument 0: ./Mos_Kullathon_HW1_main
Argument 1: Hello,
Argument 2: these
Argument 3: are
Argument 4: overridden
Argument 5: options
Argument 6: 3
Argument 7: 6
Argument 8: 9
student@student:~/asmt/csc415-assignment-1-mosguinz$
```