

Needed to change `#include "functions.h"` to `#include "src/functions.h"` so it can look for the file in the src directory since the driver.c is in the root directory.

Screenshot 1

Making the makefile

```
[15:04:17] mje2@joey12:~ [18] cd CPSC2310/  
[15:04:23] mje2@joey12:~/CPSC2310 [19] ls  
[15:04:24] mje2@joey12:~/CPSC2310 [20] touch makefile  
[15:04:32] mje2@joey12:~/CPSC2310 [21] ls  
makefile  
[15:04:33] mje2@joey12:~/CPSC2310 [22] |
```

Screenshot 2

Inputting in the code for the makefile

```
Windows PowerShell  
MESSAGE=HELLO WORLD!  
  
all: build  
    @echo "All done"  
build:  
    @echo "${MESSAGE}"  
|  
~  
~  
~  
~
```

Screenshot 3

Make and make build command

```
[15:08:18] mje2@joey12:~/CPSC2310 [23] vim makefile  
[15:30:34] mje2@joey12:~/CPSC2310 [24] make  
HELLO WORLD!  
All done  
[15:57:56] mje2@joey12:~/CPSC2310 [25] make build  
HELLO WORLD!  
[16:49:59] mje2@joey12:~/CPSC2310 [26] |
```

Screenshot 4

Created the tar, untar and list targets and ran them

```

[20:39:52] mje2@joey11:~/CPSC2310/Lab3 [11] make list
ls -la
total 20
drwx--x--x 3 mje2 cuuser 4096 Sep 18 20:39 .
drwx--x--x 3 mje2 cuuser 4096 Sep 18 20:32 ..
-rw----- 1 mje2 cuuser  631 Sep 17 08:05 driver.c
-rw----- 1 mje2 cuuser  164 Sep 18 20:39 makefile
drwx--x--x 2 mje2 cuuser 4096 Sep 18 20:33 src
[20:39:57] mje2@joey11:~/CPSC2310/Lab3 [12] make tar
tar -czvf test.tar.gz *
driver.c
makefile
src/
src/functions.c
src/functions.h
[20:40:06] mje2@joey11:~/CPSC2310/Lab3 [13] make untar
tar -xzvf test.tar.gz
driver.c
makefile
src/
src/functions.c
src/functions.h
[20:40:55] mje2@joey11:~/CPSC2310/Lab3 [14] |

```

Screenshot 5

Changed the all target to have build tar and list and ran

```

[20:40:55] mje2@joey11:~/CPSC2310/Lab3 [14] vim makefile
[20:42:48] mje2@joey11:~/CPSC2310/Lab3 [15] make all
HELLO WORLD!
tar -czvf test.tar.gz *
driver.c
makefile
src/
src/functions.c
src/functions.h
test.tar.gz
ls -la
total 24
drwx--x--x 3 mje2 cuuser 4096 Sep 18 20:42 .
drwx--x--x 3 mje2 cuuser 4096 Sep 18 20:32 ..
-rw----- 1 mje2 cuuser  631 Sep 17 08:05 driver.c
-rw----- 1 mje2 cuuser  173 Sep 18 20:42 makefile
drwx--x--x 2 mje2 cuuser 4096 Sep 18 20:33 src
-rw----- 1 mje2 cuuser 1416 Sep 18 20:43 test.tar.gz
All Done
[20:43:11] mje2@joey11:~/CPSC2310/Lab3 [16] |

```

Screenshot 6

Updated the makefile to make gcc

```
make: *** [makefile:18: driver.o] Error 1
[21:03:03] mje2@joey11:~/CPSC2310/Lab3 [40] make
gcc -Wall -g -Isrc -c src/functions.c -o src/functions.o
gcc -Wall -g -Isrc -c driver.c -o driver.o
gcc src/functions.o driver.o -o out -lm
All Done!
[21:04:44] mje2@joey11:~/CPSC2310/Lab3 [41] |
```

Screenshot 7

Ran make which to test out the wildcard commands

```
[21:04:44] mje2@joey11:~/CPSC2310/Lab3 [41] make which
FOUND SOURCES: driver.c src/functions.c
FOUND HEADERS:  src/functions.h
[21:07:56] mje2@joey11:~/CPSC2310/Lab3 [42] |
```