I had to change the #include for the "functions.h" to "src/functions.h" to make sure it was looking for the file in the right location

```
File Edit Options Buffers Tools Makefile Help
MESSAGE=HELLO WORLD!

all: build
        @echo "All Done"

build:
        @echo "${MESSAGE}"




-UUU:**--F1   makefile          All L7       (GNUmakefile) --------
Auto-saving...done
```

```
[18:23:14] spupke@ada1:~/cpsc2310/Lab3/src [11] emacs makefile
[18:26:47] spupke@ada1:~/cpsc2310/Lab3/src [12] ls -R
.:
functions.c  functions.h  makefile
[18:26:50] spupke@ada1:~/cpsc2310/Lab3/src [13] cd ..
[18:26:53] spupke@ada1:~/cpsc2310/Lab3 [14] ls -R
.:
driver.c  makefile  src

./src:
functions.c  functions.h  makefile
[18:26:55] spupke@ada1:~/cpsc2310/Lab3 [15]
```
Screenshot to show my username and my files

```
[18:28:32] spupke@ada1:~/cpsc2310/Lab3/src [20] make
HELLO WORLD!
All Done
[18:28:40] spupke@ada1:~/cpsc2310/Lab3/src [21] make all
HELLO WORLD!
All Done
[18:28:42] spupke@ada1:~/cpsc2310/Lab3/src [22] make build
HELLO WORLD!
[18:29:30] spupke@ada1:~/cpsc2310/Lab3/src [23]
```

```makefile
MESSAGE=HELLO WORLD!

all: build
        @echo "All Done"

build:
        @echo "${MESSAGE}"

tar:
        tar -cvf Lab3.tar.gz *

untar:
        tar -xvf Lab3.tar.gz

list:
        ls -R
```

```
[18:48:45] spupke@ada1:~/cpsc2310/Lab3 [111] make tar
tar -cvf Lab3.tar.gz *
driver.c
makefile
src/
src/functions.h
src/functions.c
[18:48:50] spupke@ada1:~/cpsc2310/Lab3 [112] make list
ls -R
.:
driver.c  Lab3.tar.gz  makefile  src

./src:
functions.c  functions.h
[18:48:53] spupke@ada1:~/cpsc2310/Lab3 [113] make untar
tar -xvf Lab3.tar.gz
driver.c
makefile
src/
src/functions.h
src/functions.c
[18:48:58] spupke@ada1:~/cpsc2310/Lab3 [114] make list
ls -R
.:
driver.c  Lab3.tar.gz  makefile  src

./src:
functions.c  functions.h
```

```
File Edit Options Buffers Tools Makefile Help
# Config, just variables
CC=gcc
CFLAGS=-Wall -g
LFLAGS=-lm
TARGET=out

# Generate source and object lists, also just string variables
C_SRCS := driver.c src/functions.c
HDRS := functions.h
OBJS := driver.o src/functions.o

# default build
all: build
        @echo "All Done!"

# Link all built objects
build: $(OBJS)
        $(CC) $(OBJS) -o $(TARGET) $(LFLAGS)

# special build rule
%.o: %.c$(HDRS)
        $(CC) $(CFLAGS) -c $< -o $@
```

```
[13:41:24] spupke@ada1:~/cpsc2310/Lab3 [5] make
gcc -Wall -g   -c -o driver.o driver.c
gcc -Wall -g   -c -o src/functions.o src/functions.c
gcc driver.o src/functions.o -o out -lm
All Done!
[13:41:31] spupke@ada1:~/cpsc2310/Lab3 [6]
```

```
[13:56:03] spupke@ada1:~/cpsc2310/Lab3 [7] make which
FOUND SOURCES: driver.c src/functions.c
FOUND HEADERS:  src/functions.h
[13:56:05] spupke@ada1:~/cpsc2310/Lab3 [8]
```