Anthony Hay Jr
CPSC 2310
Professor Cabrera
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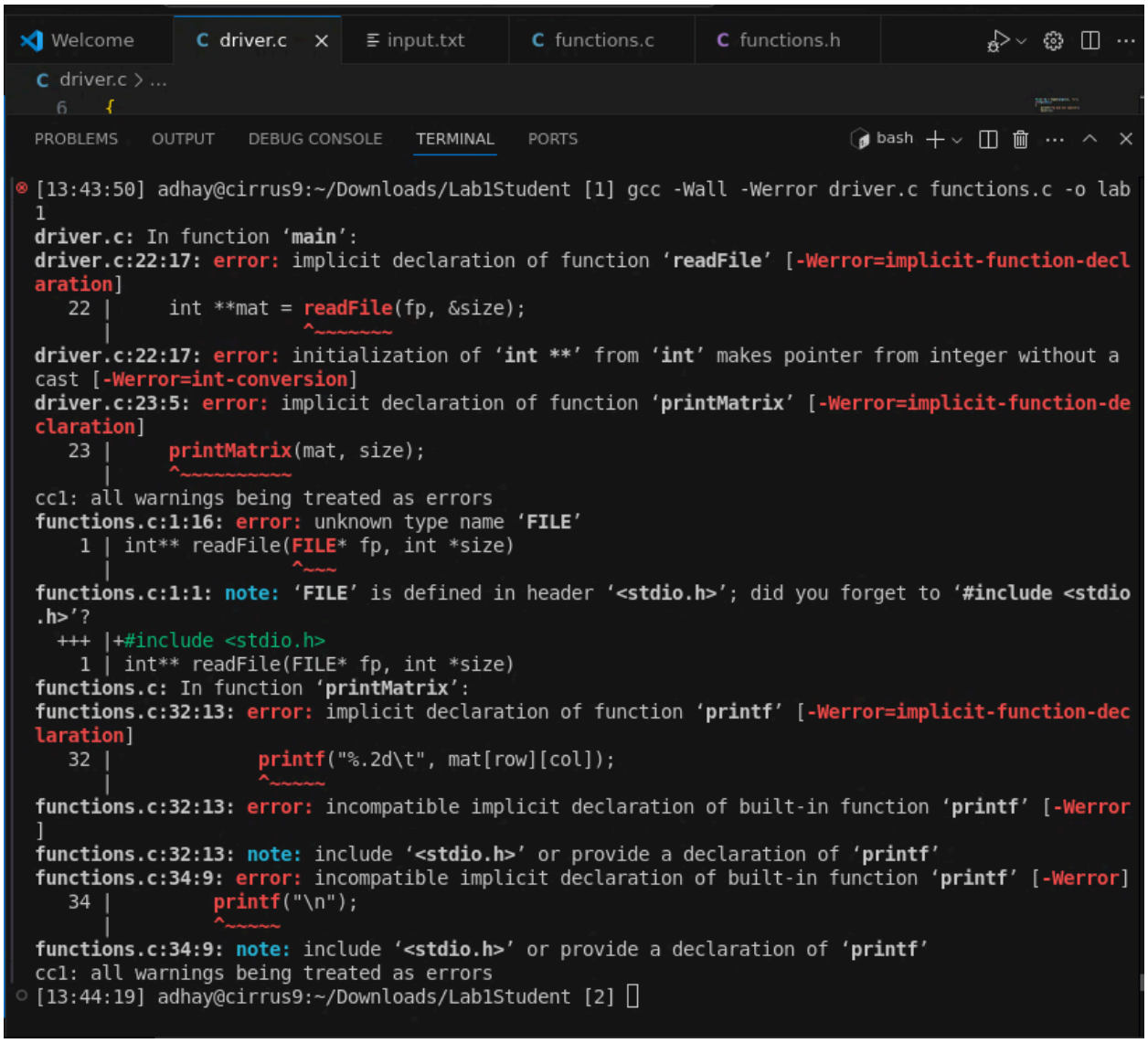
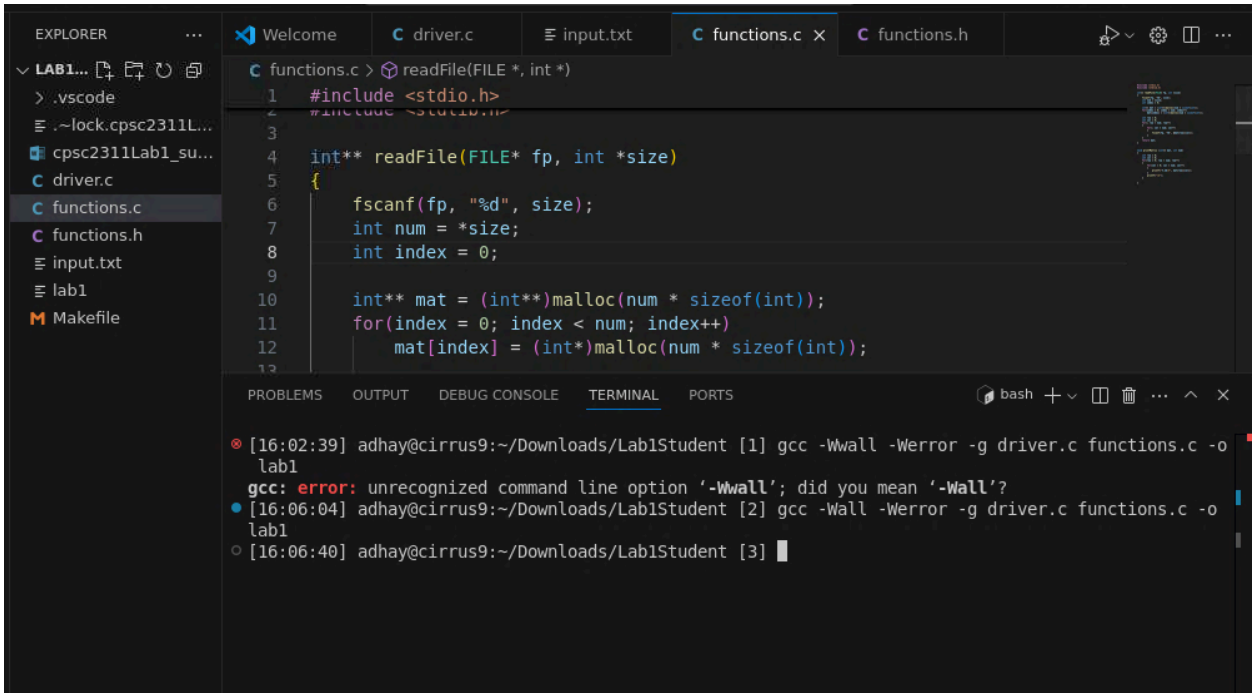
Part 1
1 (Screenshot of Compile time before fixing code)

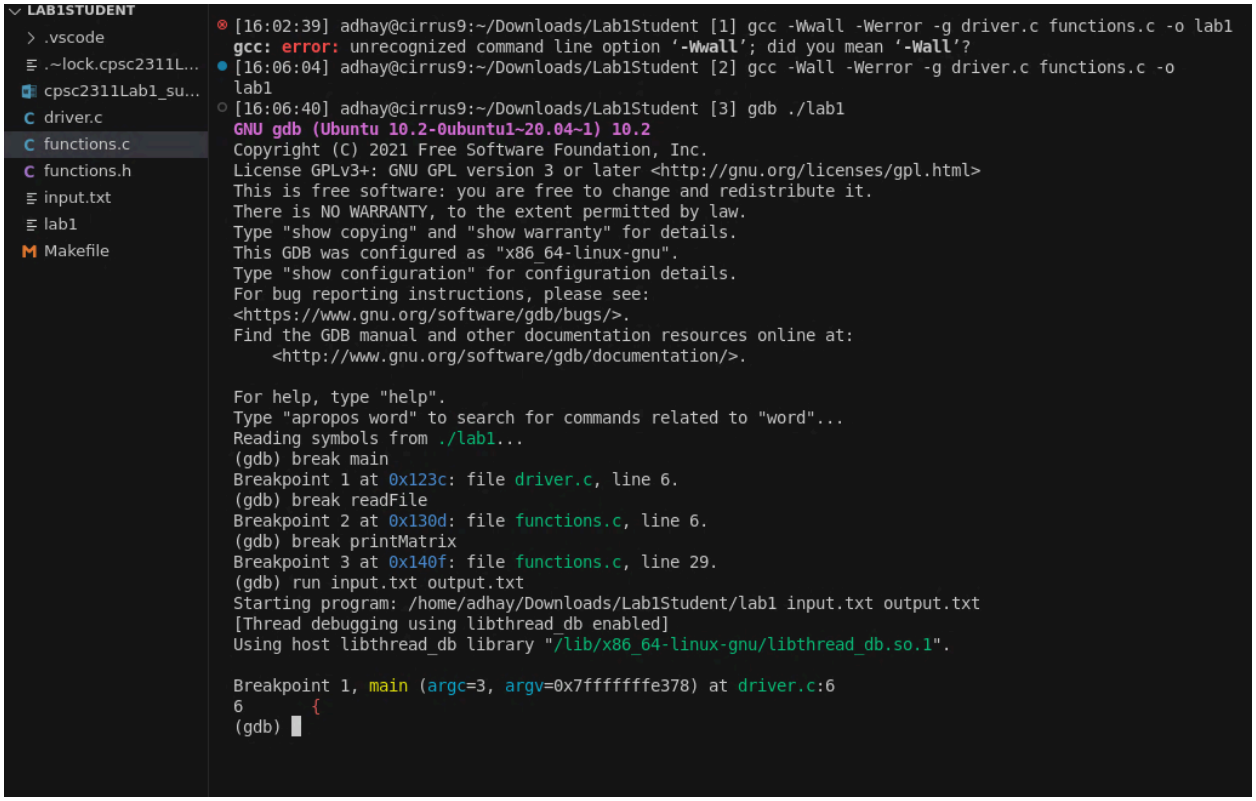


2 (All compile-time errors and warnings resolved)



Part 2

3 (set breakpoints and ran program in gdb)



4(Runtime error traced , matrix size = 0 / segmentation fault due to file opened in write mode)

```
Breakpoint 2, readFile (fp=0x55555555a150, size=0x7fffffffe264) at functions.c:6
6           fscanf(fp, "%d", size);
(gdb) step
__isoc99_fscanf (stream=0x55555555a150, format=0x55555555606b "%d") at isoc99_fscanf.c:25
25      isoc99_fscanf.c: No such file or directory.
(gdb) next
29      in isoc99_fscanf.c
(gdb)
30      in isoc99_fscanf.c
(gdb) next
33      in isoc99_fscanf.c
(gdb) next
readFile (fp=0x55555555a150, size=0x7fffffffe264) at functions.c:7
7           int num = *size;
(gdb) next
8           int index = 0;
(gdb) next
10          int** mat = (int**)malloc(num * sizeof(int));
(gdb) next
11          for(index = 0; index < num; index++)
(gdb) continue
Continuing.

Breakpoint 3, printMatrix (mat=0x55555555a330, num=0) at functions.c:29
29          int row = 0;
(gdb) c
Continuing.
[Inferior 1 (process 999420) exited normally]
(gdb) Quit
(gdb) bt
```

5 (segmentation fault)

```
[17:39:10] adhay@cirrus9:~/Downloads/Lab1Student [13] gcc -Wall -Werror -g driver.c functions.c -o lab1
[17:47:37] adhay@cirrus9:~/Downloads/Lab1Student [14] ./lab1 input.txt dummy.txt
checking command line arguments
argc = 3
Matrix size = 5
Finished reading matrix.
01      01      01      01      01
00      00      00      00      00
00      00      00      00      00
00      00      00      00      00
Segmentation fault (core dumped)
[17:47:46] adhay@cirrus9:~/Downloads/Lab1Student [15]
```

Size was never given a valid value since the file was opened in write mode it erased the input.txt. The fscan failed and the size was 0 . the loops were skipped