

2MP3 Q6 – Final

Intro

- Download the [quiz folder](#) from one drive, make sure you are able to access it after getting the password from us.
- All instructions have been mentioned within the C file as requested before
- Most of the setup has already been implemented within the C file, you just have to fill the gaps!

The C file will take in 4 arguments from the terminal (see image below if you don't understand)

- `1` test case number (use `1` for testing you code)
- `input_names_1.txt` contains names of various cars, first line will be the number of cars.
- `input_max_speeds_1.txt` contains corresponding speeds, first line IS NOT the number, it's the speed of the first car in the `input_names_1.txt` file
- `input_prices_1.txt` contains corresponding prices of the given cars

Output

Use `gcc quiz6_handout.c` to compile

and then `./a.out 1 input_names_1.txt input_max_speeds_1.txt input_prices_1.txt` to run the code.

Contents of the text files:

```
shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ cat input_names_1.txt
7
Tesla_Model_S
Bugatti_Chiron
Lamborghini_Huracan
Porsche_911
Ferrari_488
Honda_Civic
Toyota_Corolla

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ cat input_max_speeds_1.txt
105
251
267
191
200
120
100↵

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ cat input_prices_1.txt
80000
3000000
250000
80000
400000
50000
50000
```

Default Output:

```
shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ gcc quiz6_handout.c

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ ./a.out 1 input_names_1.txt input_max_speeds_1.txt input_prices_1.txt

List of cars:
< Build: , Top Speed: 0 mph, Price: $0 >

Sorted list of cars:
< Build: , Top Speed: 0 mph, Price: $0 >

Results:
Fastest car: < Build: , Top-Speed: 0 mph, Price: 0 >
Slowest car: < Build: , Top-Speed: 0 mph, Price: 0 >
```

Expected output AFTER you finish you quiz:

```

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ gcc quiz6_sol.c

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ ./a.out 1 input_names_1.txt input_max_speeds_1.txt input_prices_1.txt

List of cars:
< Build: Tesla_Model_S, Top Speed: 105 mph, Price: $80000 >
< Build: Bugatti_Chiron, Top Speed: 251 mph, Price: $3000000 >
< Build: Lamborghini_Huracan, Top Speed: 267 mph, Price: $250000 >
< Build: Porsche_911, Top Speed: 191 mph, Price: $80000 >
< Build: Ferrari_488, Top Speed: 200 mph, Price: $400000 >
< Build: Honda_Civic, Top Speed: 120 mph, Price: $50000 >
< Build: Toyota_Corolla, Top Speed: 100 mph, Price: $50000 >

Sorted list of cars:
< Build: Honda_Civic, Top Speed: 120 mph, Price: $50000 >
< Build: Toyota_Corolla, Top Speed: 100 mph, Price: $50000 >
< Build: Porsche_911, Top Speed: 191 mph, Price: $80000 >
< Build: Tesla_Model_S, Top Speed: 105 mph, Price: $80000 >
< Build: Lamborghini_Huracan, Top Speed: 267 mph, Price: $250000 >
< Build: Ferrari_488, Top Speed: 200 mph, Price: $400000 >
< Build: Bugatti_Chiron, Top Speed: 251 mph, Price: $3000000 >

Results:
Fastest car: < Build: Lamborghini_Huracan, Top-Speed: 267 mph, Price: 250000 >
Slowest car: < Build: Toyota_Corolla, Top-Speed: 100 mph, Price: 50000 >

```

Output Files: (Make sure yours looks **EXACTLY** same, ask for help if you are stuck with formatting)

```

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ cat output_a_1.txt
< Build: Honda_Civic, Top Speed: 120 mph, Price: $50000 >
< Build: Toyota_Corolla, Top Speed: 100 mph, Price: $50000 >
< Build: Porsche_911, Top Speed: 191 mph, Price: $80000 >
< Build: Tesla_Model_S, Top Speed: 105 mph, Price: $80000 >
< Build: Lamborghini_Huracan, Top Speed: 267 mph, Price: $250000 >
< Build: Ferrari_488, Top Speed: 200 mph, Price: $400000 >
< Build: Bugatti_Chiron, Top Speed: 251 mph, Price: $3000000 >

shaikh@inspiron:/m/c/U/U/D/2MP3_Q6{}
$ cat output_b_1.txt
Fastest car: < Build: Lamborghini_Huracan, Top-Speed: 267 mph, Price: 250000 >
Slowest car: < Build: Toyota_Corolla, Top-Speed: 100 mph, Price: 50000 >

```

use `if cmp -s sample_output_b_1.txt output_b_1.txt; then echo true; else echo false; fi` and `if cmp -s sample_output_a_1.txt output_a_1.txt; then echo true; else echo false; fi` to compare your output files with the sample ones

Submission

- Rename your file `quiz6_macid.c`
- You only have to upload one file, DO NOT upload any text files.
- Upload your `quiz6_macid.c` file to the **Quiz6_M** dropbox on codepost