Lab7
Deadline: In lab on Nov 16

Requirements
We are writing a program that stores information of the students in a class and enables user to manipulate the data regarding each student. The program has the following features:

Each student in class has these attributes:
Last name
First name
Student number
Midterm Grade
Final Grade

Prints the list of students in alphabetical order of their last names using QuickSort. Depending on which option is selected, the grades of all students are written to the output file based on the following rule:
1: For an average higher than 90%
2: For an average between 80%-90%
3: For an average between 70%-80%
4: For an average between 60%-70%
5: For an average below 60%

Implementation Details
1. Assume that everyone has first and last name.
2. Student number is in the same format as your A number. Let's assume that it is A followed by 7 digits.
3. The midterm and the final grade ranges from 0 to 100.
4. The average is calculated by (midterm grade + final grade)/2.
5. The sorting criteria is last name first > first name > student number > midterm grade > final grade.
6. There will be no corner case testing for this lab, so assume that all inputs are valid.

How to Compile and Run
```
gcc lab7.c -o <output executable>
./<executable> <input file> <output file> <option>
```

Grading
Any grading failure due to not following instructions will result in 0. You will get one chance to show your work to the instructor.
- (1 point) All files are submitted correctly using the instructions.
- (3 point) Generate a correct solution to the problem(s) in this lab. 3 test inputs will be used.

Submission Files

- You must submit only one file named to Learning Hub: **lab7.c**
- Submit it to learning hub before the deadline