CS103-Computer Programming 2
Programming Exercise 6

Write a C program that reads the record of **N** students from an input file specified by the user from the terminal. The input file should contain on the first line the positive integer value of **N** and then followed by the list of students with their **name, ID number, age,** and **gender**. Use an *array of structs* to store the student records. The structure definition of student should include the following details: name, ID number, age, and gender. The task of grouping and sorting should be implemented as a function that has array of structures as parameter. The program should write in the output file that was specified when the program was executed, and display on the screen these records grouped by gender and ordered alphabetically by name.

Sample Run: (Suppose the user typed in the terminal the following)

```
./pe6.exe students.txt sorted.txt
```

Sample content of input file
"students.txt"

```
10

Juan       05    18    M
Pedro      06    17    M
Maria      02    19    F
Carlos     11    16    M
Clara      01    18    F
Bella      09    18    F
Anton      07    19    M
Ana        10    17    F
Victoria   03    18    F
Berto      12    19    M
```

Sample output on the screen and output file
"sorted.txt"

```
NAME          ID#   AGE
--------------------------------
MALE:
Anton         07    19
Berto         12    19
Carlos        11    16
Juan          05    18
Pedro         06    17

FEMALE:
Ana           10    17
Bella         09    18
Clara         01    18
Maria         02    19
Victoria      03    18
```