

ATILIM UNIVERSITY
Department of Computer Engineering
CMPE 114 Computer Programming - II
2019-2020 SPRING
Assignment II- Strings & Structures & Files

Due date: June 12, 2020 Friday 23.55

Write a complete C Program that holds information about n employees in IT Company in an array of structures. A structure named **Employee** which includes the following information: id, surname, number of projects he/she currently work on and job (i.e. Coder, Manager, Tester) is created. There are two functions and a main function which performs following:

In the function “CodersInfo”:

- This function will receive an array of structures and size of the array as parameters.
- Write the information of coders who work on more than 10 projects to a text file named **coders.txt**. File operations should be done in that function.
- Output the number of coders who work on more than 10 projects in that function as well.

In the function “SortEmployees”:

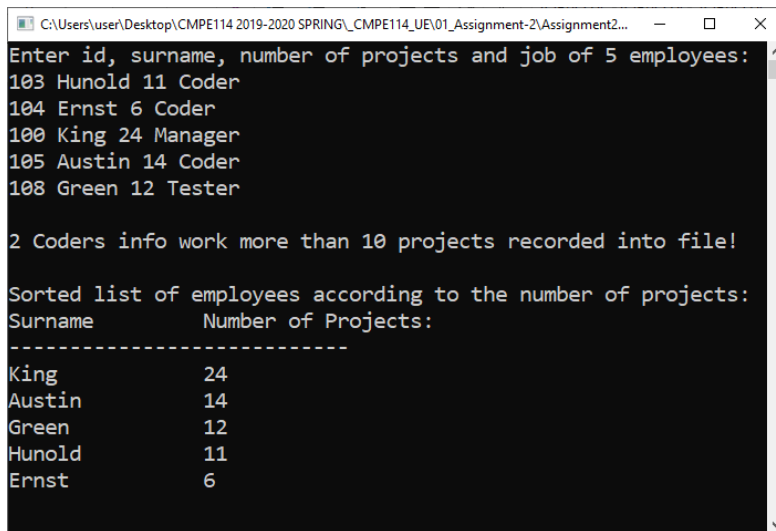
- This function will receive an array of structures and size of the array as parameters.
- Sort the employees according to the number of projects from highest number to lowest.
- Output the sorted list of employees with their surname and number of projects (see the Sample Run below).

In the main program, you should do the following:

- Define an array of structure to hold the information of n employees.
- Input id, surname, number of projects and job into array of structures.
- Call the function “CodersInfo” to write the information of coders, who work on more than 10 projects into a file.
- Call the function “SortEmployees” to sort the employees according to the number of projects from highest number to lowest and output the sorted list with their surname and number of projects.

Please see Sample Run below based on the given example.

SAMPLE RUN

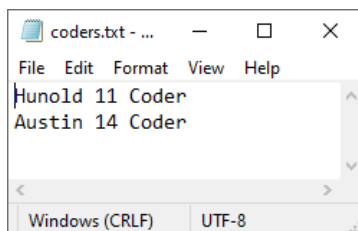


```
C:\Users\user\Desktop\CMPE114 2019-2020 SPRING\CMPE114_UE\01_Assignment-2\Assignment2... - [X]
Enter id, surname, number of projects and job of 5 employees:
103 Hunold 11 Coder
104 Ernst 6 Coder
100 King 24 Manager
105 Austin 14 Coder
108 Green 12 Tester

2 Coders info work more than 10 projects recorded into file!

Sorted list of employees according to the number of projects:
Surname      Number of Projects:
-----
King         24
Austin       14
Green        12
Hunold       11
Ernst        6
```

The content of coders.txt file after executing the code:



```
coders.txt - ... [X]
File Edit Format View Help
Hunold 11 Coder
Austin 14 Coder
Windows (CRLF) UTF-8
```

Notes on Grading:

This homework will be graded out of 100.

- You should add comments to your code, to explain your work in detail. (This part is 10 pts)
- Code Execution - Working Correctly without Errors (20 pts). If there are some errors and your code can not be compiled, then it is evaluated by partial points – out of 80 pts.

IMPORTANT NOTES:

- The name of your homework file should be **"yoursurname_name.c"**
- You should use indentation and comments in your code.
- You should upload your homework file to the Moodle system until **June 12, 2020 Friday 23.55. Late homeworks will NOT be graded.**
- **Cheating will NOT be tolerated.** Special software will be used to verify if the submitted homework is your original work or copied from someone/somewhere else. If the code similarity between any two or more submissions is higher than %90, we also examine and compare these codes by eye. If any case of cheating is detected, at any time, **you will get ZERO from your homework.**