

## CSE 101- INTRODUCTION TO COMPUTER SCIENCE

### Homework #05

**Due date: 28.12.2018 13:00**

In this homework you have to sort all the people given in "hw4\_disordered\_people.txt". You will get the sort column from the user and write the ordered people in "orderedFile.txt".

Standart column order is as shown (items aren't sorted):

ID	NAME	SIR NAME	MAIL
4564765	Andria	MALLE	abc@gmail.com
246574	Andrea	DENNIS	abcc@gmail.com
454	Angeline	TOWNSEND	townsend@gmail.com
3245	Ania	DEAR	defghjklmnd@gmail.com
.....			

The column selected by the user will be placed on the first column and the order will be made according to it. Sample:

Give a Sort Metric (I = ID	N= NAME	S= SIR NAME	M=MAIL): M
<u>Output file</u> will be as shown (sorted by mail):			
MAIL	ID	NAME	SIR NAME (this line must be added)
abc@gmail.com	4564765	Andria	MALLE
abcc@gmail.com	246574	Andrea	DENNIS
defghjklmnd@gmail.com	3245	Ania	DEAR
townsend@gmail.com	454	Angeline	TOWNSEND
.....			

Give a Sort Metric (I = ID	N= NAME	S= SIR NAME	M=MAIL): N
<u>Output file</u> will be as shown (sorted by name):			
NAME	ID	SIR NAME	MAIL (this line must be added)
Andrea	246574	DENNIS	abcc@gmail.com
Andria	4564765	MALLE	abc@gmail.com
Ania	3245	DEAR	defghjklmnd@gmail.com
Angeline	454	TOWNSEND	townsend@gmail.com
.....			

The order of ascii table will be used in the sorting. Detailed in the next page.

#### Tips:

- If you need you can use itoa function to convert integer to char array:  
<http://www.cplusplus.com/reference/cstdlib/itoa/>
- There is no restriction to use of c libraries.

#### Rules:

- Console inputs must be accept upper case character "N, M,I,S". Can be accept lower case character "n, m, i, s"
- Output file name: orderedFile.txt
- Input file name is: hw4\_disordered\_people.txt
- Upload your files only in a .zip file on Moodle. The zip name should be in the same in the form of: number\_name\_surname (g.e. 181041001\_abdullahsalih\_bayraktar.zip).
- Zip file can contain source files with "c" and or "h" extension. No other files excluding hw4\_disordered\_people.txt (look at next rule).
- **You can add a working "hw4\_disordered\_people.txt" file in zip. (It is chanced because it can be possible that your homework is not finish and work only with unique input file).**
- **main file name: student\_id\_main.c (e.g. 181041001\_main.c)**
- If you upload wrong file formats on Moodle. You will lose point. Be careful!

If you have any question about homework, send e-mail to: [asbayraktar@gtu.edu.tr](mailto:asbayraktar@gtu.edu.tr)

**Good Luck!**

#### Update notes:

V1.0.1 Date: 24.12.2018

- No major or minor update, Tables are extended to better understand.
- Tips added.
- Submission rule extended.
- Added main file name rule. Same as Moodle.

### Sorting Example:

Given char arrays: Aa, aaa, ve Aaa, bb, a, c, a a, 112, 45

Character on ascii table (this table is constructed from ascii table only for this example.)

Character	Ascii (Decimal)
A	65
a	97
b	98
SPACE " "	32
c	99
1	49
2	50
4	52
5	53

Unordered char arrays:

Sample char array	As Ascii Number
Aa	65 ,97
aaa	97, 97, 97
Aaa	65 ,97
bb	98, 98
a	97
c	99
a a	97, 32, 97
112	49, 49, 50
45	52, 53

Ordered char arrays:

Sample Char array	As Ascii Number
112	49, 49, 50
45	52, 53
Aa	65 ,97
Aaa	65 ,97, 97
a	97
a a	97, 32, 97
aaa	97, 97, 97
bb	98, 98
c	99