ANKARA UNIVERSITY
COMPUTER ENGINEERING DEPARTMENT

COM1002-COMPUTER PROGRAMMING 2

Spring 2020-21 Term

LAB8 Quiz

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Duration: 120 minutes

Task: Given at most 100 patient names and their blood cell types (BCT), please provide the BCTs of the queried patients.

Detailed Specifications:

- Assume that each patient has only one record in the given list.
- Read the given information (i.e. patient names and their BCTs) and load them to the memory, i.e. using two different arrays. BCTs occupy at most 4 characters.
- Patient names may be queried from the standard input using a mix of capital and small letters. Assume a match if the names match case insensitively.
- Assume that each patient name occupies at most 15 characters.
- Output patient names will be printed using all small letters.
- If the query item name is not in the given list, your program should print **0+** to the screen.
- The list of patient names and their BCTs are separated from the query names with the word: **start**
- The query items are terminated with the word: **end**

Input format: [S] stands for a Space character

<patient1_name>[S]< BCT1>
<patient2_name>[S]< BCT2>
..
<patientN_name>[S]< BCTN>
start
< patientX_name>
< patientY_name>
< patientZ_name>
..
end

Output Formatı:

< patientX_name>[S]< BCTX>
< patientY_name>[S]< BCTY>
< patientZ_name>[S]0+ // → does not exist!
..

Hints:

1. You can include <string.h> file and use related string functions if you need them.
2. You can use [100][15] two dimensional character array to store the patient names.
3. You can use [100][5] two dimensional char array to store BCTs.
4. When you load patient names to the names character array, you should load the corresponding prices to the second (BCT) array with the same row index.

Testing:

We provided you a sample I/O file pair. Test your programs with these files while developing your program. Moreover, create your own test files according to the specifications to test more.

As usual, use *input redirection* mechanism of your operating system to test your programs. For example, if your executable is called as **Lab8**, redirect the input.txt file to standard input using **<** operator and redirect your outputs to a file using **>** operator such as:

> ./Lab8<input.txt>output.txt

This kind of execution enables your programs to read inputs from a file without writing any file related functions (e.g. fopen(), fscanf() etc.). In other words, the getchar() or scanf() functions in your code reads data from the redirected files instead of the std. input in this way (e.g. keyboard).

Submission:

Before submission, make sure that your source file is named as **StudentNumber.c**

Good luck ☺