Computer Engineering Department

TED University

CMPE 252 - C Programming, Spring 2021

Prelab 03

You are asked to complete `keywordSearch.c` program file which has been already given on Moodle. Please download and try to fill missing parts of code. This program has two functions which are `main` and `searchKeyword`.

`main` function

- Character arrays (strings) are already given which contain name and surname in the format of "*name_surname*" and an array of pointers to strings is created with the name `nameList` using the given strings (`p1`, `p2`, …, `p9`).
- A keyword is read from the standard input into the string `keyword`.
- `searchKeyword` function is called with three arguments, which are the array of pointers `nameList`, its size 9, and the string `keyword`.
- The strings that can be accessed using `nameList` are printed to check whether their contents remain the same after calling `searchKeyword` function.

`searchKeyword` function

- Search through the strings and print the ones whose *surname* part is equal to keyword.

As shown in the example runs below, the strings are printed in "Name Surname" format (the first letters are capitalized).

Some functions that you might need to use are as follows:

```
//Compares s1 and s2 alphabetically.
int strcmp(const char* s1, const char* s2);

//Copies the string pointed to, by src to dest.
strcpy(char* dest, const char* src);

//Breaks string str into a series of tokens separated by delim
strtok(char* str, const char* delim);

//Converts lowercase letter of str string to uppercase.
toupper(str[i]);
```

Hints:

`strtok` function changes the content of its first string argument so you need to call `strtok` function on a copy of the string argument if you do not want to change its content. For each string that can be accessed using `nameList`, you can accept their max length as 100. So, you do not need to make any dynamic memory allocation.

Example run 1:

```
Enter a keyword: bale

Zoe Bale
James Bale
Dustin Bale

zoe_bale
sam_rodriguez
jack_alonso
david_studi
denzel_feldman
james_bale
james_willis
michael_james
dustin_bale
```

Example run 2:

```
Enter a keyword: james

Michael James

zoe_bale
sam_rodriguez
jack_alonso
david_studi
denzel_feldman
james_bale
james_willis
michael_james
dustin_bale
```