

CMPE 252 - C Programming, Spring 2023

Prelab 02

You are asked to complete `keywordSearch.c` program file which has been already given on LMS. 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