CS19101 Programming and Data Structures: Pointer

General instruction to be followed strictly

1. Do not use any global variable or static variable unless you are explicitly allowed to do so.

2. Use proper indentation in your code and comment.

3. **Name your file as** `<roll_no>_<assignment_no>`. **For example, if your roll number is 14CS10001 and you are submitting assignment 3, then name your file as** `14CS10001_3.c` **or** `14CS10001_3.cpp` **as applicable.**

4. **Write your name, roll number, and assignment number at the beginning of your program.**

5. Make your program as efficient as possible.

Take 10 names, which include the first name and the surname, as input from the user. Assume that any first name and any surname contains at most 50 characters. Sort these 10 names in dictionary according to their first names and output. Also sort these 10 names in dictionary order according to their surnames and output.

You are not allowed to copy one string into another either by using strcpy function or by writing a loop to copy character-by-character or by any other means. Hint: Use pointers.

Submit one (single) C/C++ program.

Sample Output

```
palash@palash-ThinkPad-X1-Yoga-3rd:~$ ./a.out
Write 10 names
Ram Das
Sham Mondal
Sachin Tendulkar
Lata Mangeskar
Sourav Ganguly
Sunil Gavaskar
Ritwik Roshan
Satyajit Ray
Rabindranath Tagore
Prakash Deb

Sorted according to first name:
Lata Mangeskar
Prakash Deb
Rabindranath Tagore
Ram Das
Ritwik Roshan
Sachin Tendulkar
Satyajit Ray
Sham Mondal
Sourav Ganguly
Sunil Gavaskar

Sorted according to last name:
Ram Das
Prakash Deb
Sourav Ganguly
Sunil Gavaskar
Lata Mangeskar
Sham Mondal
Satyajit Ray
Ritwik Roshan
Rabindranath Tagore
palash@palash-ThinkPad-X1-Yoga-3rd:~$
```

Policy on Plagiarism

Academic integrity is expected from all the students. Ideally, you should work on the assignment/exam consulting only the material we share with you. You are required to properly mention/cite anything else you look at. Any student submitting plagiarised code will be penalised heavily. Repeated violators of our policy will be deregistered from the course. Read this to know what is plagiarism.