National University of Computer and Emerging Sciences

Laboratory Manual

for

Programming Fundamentals

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Section	BSE B
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Instructions:

1. Declare **<u>const int Size</u>** to to declare 1D array
2. Write a menu -driven program, and use do while loop. The program should ask the user if he/she wants to test another function, print the appropriate menu.
3. The string data_type in C++ provides various functionality of string manipulation. They are:

   a. **strcpy()**: It is used to copy characters from one string to another string.
   b. **strlen()**: It is used to find the length of the given string.
   c. **strcmp()**: It is used to compare the two given strings.

Question No 1. Write a C++ function to compare two do the following tasks:

A- Compare two char arrays
B- Copy contents of 1 array into other and then compare both

Question No 2: Write a program that asks the user to input character array and then your task is to find the exact length of that character array i.e., how many characters there in an array are. You must not include spaces.

Example:

Input:

Enter a sentence: Hi how are you?

Output:

Total characters are: 12

Question No 3: Write a C++ program to read a sentence from console into a character array. Now separate each word and find the word with minimum length and display it on screen. You also have to make integer array to store length of each word in sentence. Your code should be generic

Sample Input	Sample Output
Summer Vacations are canceled this year.	6 9 3 8 4 4 Min: 3

*Note: Your sentence always ends with full stop.

Question No 4: Write a program that takes two inputs from the user. The 1st input will be a character. While the 2nd input will be a character array. Your program must now delete the character from the character array and displays the updated char array on the screen.

Input:

Enter a character: a
Enter a sentence: What is your name
Output:
Wht is your nme

Hint: You must use cin.ignore() after single character input and cin.getline() for char array. Do it without cin.ignore() and see the buffer blunder by yourself.
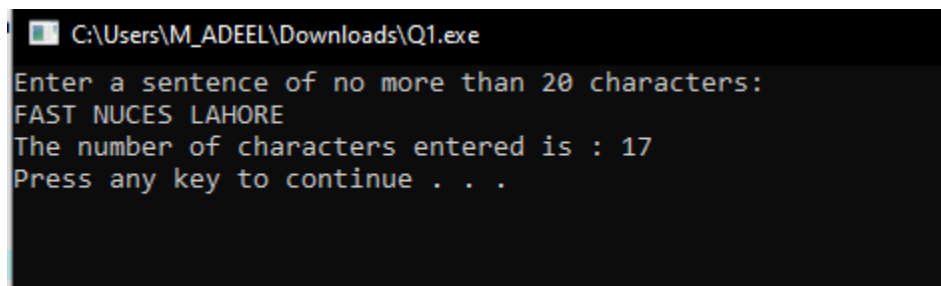
Question No 5: Ask user for an input, store that input in a char array. Count small letters, capital letters, its and special charters in that input.

Question No 6. Ask user for an input, store that input in a char array. Ask user for any char, find if that exists in the array and calculate how many times it occurred.

Question No 7. Ask user for an input, store that input in a char array. Convert all small letters into capital letters and vise versa.

Question No 8:

Write a function that returns an integer and accepts a character array as an argument. The function should count the number of characters in the character array and return that number. Demonstrate the function in a simple program that asks the user to input a string, passes it to the function, and then displays the function's return value.

-----------GOOD LUCK-----------