

TOBB ETU – 2025 Fall
BIL 214 – Exercises 4

Instructions

- Download “Exercises4.zip” to write and test your codes.
- “exercises4.h” includes function declarations. Do not change “exercises4.h”.
- Write function definitions to “exercises4.c”. Do not include any library to “exercises4.c”.
- You can use “main.c” to test the functions. “results.txt” stores the expected outputs.
- You can assume that parameters are always passed correctly by the user.
- You can assume that the lengths of the arrays are sufficient.
- You can assume that strings end with the null character as expected.
- Do not use integer value of a char directly. For example, do not use 65 for ‘A’.

Questions

- soru01.** The function converts upper-case and lower-case letters of the string “s” to lower-case and upper-case respectively. You are not allowed to make any variable declarations.
- soru02.** The function makes a search on the string “s” and returns the address of the first occurrence of the character “c”. Return NULL, if there is no such character in the string. You are not allowed to make any variable declarations.
- soru03.** The function makes a search on the string “s” and saves the address of the last occurrence of the character “c” to the memory pointed by “p”. Save NULL, if there is no such character in the string. You are not allowed to make any variable declarations.
- soru04.** The function makes a search on the string “s” and saves the number of occurrences of character “c” to the integer pointed by count. You are not allowed to make any variable declarations.
- soru05.** The function removes all occurrences of the character “c” from the string “s” and saves the number of removals to the integer pointed by “cnt”. You are not allowed to make any variable declarations.
- soru06.** The function compares two strings alphabetically according to ASCII Table. You are not allowed to make any variable declarations.
 - Return 0, if two strings are equal.
 - Return -1, if the first string comes earlier according to ASCII Table.
 - Return 1, if the second string comes earlier according to ASCII Table.
- soru07.** The function determines whether the string “s” is palindrome (the same forward and backward) or not. If it is palindrome return 1, otherwise return 0. You are not allowed to make any variable declarations except 1 pointer.
- soru08.** The function finds the maximum value of the array “A” and saves its address to the memory pointed by “addr”. You are not allowed to make any variable declarations except 1 pointer.
- soru09.** The function finds the minimum value of the 2D array “A” and saves it to the integer pointed by “minPtr”. You are not allowed to make any variable declarations except 1 pointer.
- soru10.** The function finds the length of each string in the string array “s” and saves them to the array A. Parameter “size” is the number of strings. You are not allowed to make any variable declarations except 1 integer and 1 pointer.