////////////////////////////////PART 3////////////////////////////////////

1. Write a program in C# Sharp to input a string and print it.
Test Data :
Input the string : Welcome, halalAlmashakl
Expected Output :
The string you entered is : Welcome, halalAlmashakl

2. Write a C# Sharp program to find the length of a string without using a library function.
Test Data :
Input the string : halalAlmashakl.com
Expected Output :
Length of the string is : 15

3. Write a C# Sharp program to separate individual characters from a string.
Test Data :
Input the string : halalAlmashakl.com
Expected Output :
The characters of the string are :
w 3 r e s o u r c e . c o m

4. Write a program in C# Sharp to print individual characters of the string in reverse order.
Test Data :
Input the string : halalAlmashakl.com
Expected Output :
The characters of the string in reverse are :

m o c . e c r u o s e r 3 w

5. Write a program in C# Sharp to count the total number of words in a string.

Test Data :
Input the string : This is halalAlmashakl.com
Expected Output :
Total number of words in the string is : 3

6. Write a program in C# Sharp to compare two strings without using a string library functions.
Test Data :
Input the 1st string : This is first string
Input the 2nd string : This is first string
Expected Output :
The length of both strings are equal and
also, both strings are equal.

7. Write a program in C# Sharp to count the number of alphabets, digits and special characters in a string.
Test Data :
Input the string : Welcome to halalAlmashakl.com
Expected Output :
Number of Alphabets in the string is : 21
Number of Digits in the string is : 1
Number of Special characters in the string is : 4

8. Write a program in C# Sharp to copy one string to another string.
Test Data :
Input the string : This is a string to be copied.
Expected Output :
The First string is : This is a string to be copied.

The Second string is : This is a string to be copied.

Number of characters copied : 31

9. Write a C# Sharp program to count the number of vowels or consonants in a string.
Test Data :
Input the string : Welcome to halalAlmashakl.com
Expected Output :
The total number of vowel in the string is : 9
The total number of consonant in the string is : 12

10. Write a C# Sharp program to find the maximum number of characters in a string.
Test Data :
Input the string : Welcome to halalAlmashakl.com
Expected Output :
The Highest frequency of character 'e'
appears number of times : 4

11. Write a C# Sharp program to sort a string array in ascending order.
Test Data :
Input the string : this is a string
Expected Output :
After sorting the string appears like :
a g h i i i n r s s s t t

12. Write a C# Sharp program to read a string through the keyboard and sort it using bubble sort.
Test Data :
Input number of strings :3
Input 3 strings below :
abcd
zxcv
mnop
Expected Output :
After sorting the array appears like :
abcd

mnop
zxcv

13. Write a program in C# Sharp to extract a substring from a given string without using the library function.
Test Data :
Input the string : This is a test string
Input the position to start extraction :5
Input the length of substring :5
Expected Output :
The substring retrieve from the string is : is a

14. Write a C# Sharp program to check whether a given substring is present in the given string.
Test Data :
Input the string : This is a Test String
Input the substring to search : Test
Expected Output :
The substring exists in the string

15. Write a C# Sharp program to read a sentence and replace lowercase characters with uppercase and vice-versa.
Test Data :
Input the string : This is a string
Expected Output :
After conversion, the string is : tHIS IS A STRING

16. Write a program in C# Sharp to check the username and password.
Test Data :
Input a username: uesr
Input a password: pass
Input a username: abcd
Input a password: 1234
Expected Output :

Password entered successfully!

17. Write a program in C# Sharp to search for the position of a substring within a string.
Test Data :
Input a String: this is a string
Input a substring to be found in the string: is
Expected Output :
Found 'is' in 'this is a string' at position 2

18. Write a C# Sharp program to check whether a character is an alphabet and not and if so, check for the case.
Test Data :
Input a character: Z

Expected Output :
The character is uppercase.

19. Write a program in C# Sharp to find the number of times a substring appears in a given string.
Test Data :
Input the original string : this is original string
Input the string to be searched for : str
Expected Output :
The string 'str' occurs 1 times

20. Write a program in C# Sharp to insert a substring before the first occurrence of a string.
Test Data :
Input the original string : this is a string
Input the string to be searched for : a
Input the string to be inserted : test
Expected Output :
The modified string is : this is test a string

21. Write a C# Sharp program to compare (less than, greater than, equal to) two substrings.
Expected Output :
str1 = 'computer', str2 = 'system'
Substring 'mp' in 'computer' is less than substring 'sy' in 'system'.

22. Write a C# Sharp program to compare two substrings that only differ in case. The first comparison ignores case and the second comparison considers case.
Expected Output :
str1 = 'COMPUTER', str2 =
'computer'
Ignore case:
Substring 'MP' in 'COMPUTER' is equal to substring 'mp' in 'compu
Honor case:
Substring 'MP' in 'COMPUTER' is greater than substring 'mp' in 'computer'.

23. Write a C# Sharp program to compare two substrings using different cultures and ignore the substring case.
Expected Output :
str1 = 'COMPUTER', str2 =
'computer'
Ignore case, Turkish culture:
Substring 'UT' in 'COMPUTER' is equal to substring 'ut' in 'computer'.

Ignore case, invariant culture:
Substring 'UT' in 'COMPUTER' is equal to substring 'ut' in 'computer'.

24. Write a C# Sharp program to compare the last names of two people. It then lists them in alphabetical order.
Expected Output :

Sorted alphabetically by last name:
Michel Jhonson
John Peterson

25. Write a C# Sharp program to compare four sets of words by using each member of the string comparison enumeration. The comparisons use the conventions of the English (United States) and Sami (Upper Sweden) cultures.
Note : The strings "encyclopedia" and "encyclopedia" are considered equivalent in the en-US culture but not in the Sami (Northern Sweden) culture.
Expected Output :
case = Case (CurrentCulture): False
case = Case (CurrentCultureIgnoreCase):
True
case = Case (InvariantCulture): False
case = Case (InvariantCultureIgnoreCase):
True
case = Case (Ordinal): False
case = Case (OrdinalIgnoreCase):
True