Lab Assignments

1. WAP to delete *n* characters from a given position of a given string.
   Input: Enter a string: University
                  Enter the number of characters to delete: 5
                  Enter the position to delete: 3
   Output: After deletion the string is: Unity
2. WAP to capitalize the first letter of each word in a given sentence. Assume that words are separated by spaces.
   Input: Enter a string: kalinga institute of technology
   Output: Kalinga Institute Of Technology
3. WAP to print a given string in an alphabetical order.
   Input: Enter a string: INDIA
   Output: After sorting the string in alphabetical order is ADIIN
4. WAP to input names of *n* persons and arrange them in alphabetic order.
   Input: Enter the value of n: 5
              Enter 5 names:
                 Raj
                 Ajay
                 Bikram
                 Prakash
                 John
   Output: After sorting the names are:
                 Ajay
                 Bikram
                 John
                 Prakash
                 Raj
5. WAP to search a pattern string in a text string.
   Input: Enter the text string: India is great
                  Enter the pattern string: is
   Output: Pattern found at index 6
6. Write a C program to check if two strings are anagrams. An anagram is a word or phrase formed by rearranging the letters of another word or phrase.
   Input 1:   Enter the first string: listen
                  Enter the second string: silent
   Output 1: Given strings are anagrams
   Input 2:   Enter the first string: speak
                  Enter the second string: silent
   Output 2: Given strings are not anagrams.

Home Assignments

1. Write a program to count the number of vowels, consonants, total number of characters and number of words present in a string.
   Input: Enter a string: Kalinga Institute of Technology
   Output: Number of vowels: 11
                 Number of consonants: 20
                 Number of characters: 31
                 Number of words: 4

2. Write a C program to remove all consecutive duplicate characters from a given string.
   Input: Enter a string: Sppeakk Loudlly
   Output: After removing duplicate characters the string is: Speak Loudly
3. Write a C program to remove all leading and trailing spaces from a given string, if any.
   Input: Enter a string: India is great
   Output: After removing leading and trailing spaces the string is: India is great
4. WAP Develop the following user defined function and test it by writing appropriate main function:
   int MatchAny(char s1[], char s2[]) : It takes two string arguments and it returns 1 if s2 is a substring of s1, returns 0 if both s1 and s2 are equal, otherwise, returns -1. Do not use any standard library functions.
   Input 1: Enter the first string: Indian
              Enter the second string: India
   Output 1: Second string is a sub-string of first string.
   Input 2: Enter the first string: India
              Enter the second string: India
   Output 2: Both strings are same.
5. WAP to replace all occurrences of a sub-string in a given string with a new one.
   Input: Enter a string: Raj and Shyam were good friends. Now, Shyam has become the enemy of Raj.
   Enter the sub-string to be replaced: Shyam
   Enter the new sub-string: Ravi
   Output: Raj and Ravi were good friends. Now, Ravi has become the enemy of Raj.
6. Write a C program to convert a string of digits into an integer value.
   Input: Enter a number as a string of digits: 125
   Output: Entered number is 125