



Faculty of Engineering
Credit Hours Engineering Programs

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برامج الساعات المعتمدة

CSE122 Computer Programming

Sheet 6: Strings

1. Write a program that reads in a String containing several words. There is exactly ONE space between each word. The program should output the first letter for each word.
 - Sample Input: "Ali Ibrahim Said".
 - Sample Output: "AIS".
2. Write a program that prompts the user to input a string and outputs the string in the uppercase form.
3. Write a program to read a string and prints it in a reverse order.
4. Write a program to read a string and the counts the number of vowels in the text. Report the sum of each found vowel.
5. Write a program to count the number of individual words in a string.
6. Write a program that prompts the user to input two strings and prints a concatenation of the two inputs.
7. For the given paragraph below, write a program that computes the frequency of all alphabetic letters (how many times each letter (from a to z) is repeated?).

"C is a general purpose computer programming language developed in 1972 by Dennis Ritchie at the Bell Telephone Laboratories for use with the UNIX operating system. Although C was designed for implementing system software, it is also widely used for developing portable application software. C is one of the most popular programming languages. It is widely used on many different software platforms, and there are few computer architectures for which a C compiler does not exist. C has greatly influenced

many other popular programming languages, most notably C++, which originally began as an extension to C.”

8. Write a program that counts the number of words “programming” in the paragraph of Q7.
9. Write your own implementation of the following functions:

```
a. void myStrCpy(char des[], const char src[]); //copies the contents of the src
    //to the des.

b. int myStrLen(const char str[]); //return the length of a string without
    //counting the null terminator.

c. int myStrCmp(const char str1[],const char str2[]); //compares str1 with str2
    //and returns 0 if str1 == str2, returns -1 if str1 < str2 and returns 1 if
    //str1 > str2

d. int atoi(const char str[]); //returns the integer value of a string
    //for example "123" ->123

e. float atof(const char str[]); //returns the float value of a string
    //for example "12.3" ->12.3
```