Real Time College

STRINGS

1. String.h library missing:
   - Strcat ([],[]) – add the second string to the end of the first one.
   - Strcopy ([], []) – copy the second string to the first one.
   - Strncpy ([], [],n) – copy first letters until n to the first string.

   Write the library yourself, and don't forget to check for errors.

2. You are given 2 strings and a number
   Char source [M]
   Target [M]
   Unsigned int n
   Transfer n letters from source to target in backwards.
   - Without using the actual string.h library
   - With using string.h library.

3. You are given two strings
   Char first [?] = "…" second = " "
   With the use of string.h library add the first string in the middle of the second one

4. You are given two strings
   Char first [?] = "…" second = " "
   Copy the first string to the second one but with capital letters only.
   - Without using strlwr from string.h library.
   - With using strlwr from string.h library.

5. You are given two strings and a number
   Char target [?]
   Source = "…"
   Unsigned int n
   Copy the first string to the second with n spaces between each word.

6. You are given two strings and a number
   Char first [?] = ".."
   Second = "…"
   Unsigned int n
   Without using string.h library:
   - Insert the source to the target string before n first letters.

- Insert the source to the target string after n first letters.

7. You are given 3 strings
   Target [?] = "..", source="..", source2 = ".."
   Compare between source and source2 and insert into target if equal, otherwise insert some sign.

8. You are given a string and a number
   Char string [] = ".."
   Int n
   Find the letter in the string n spot.
   The string is round:
   - Positive n when reached the end of the string is starting over.
   - Negative n when reached the end of the string searching backwards from the end

9. Palindrome
   - String is a palindrome if you get equal word reading it from both sides.
     Check if the given string is a palindrome without the use of string.h library

   - New palindrome rule - skip the signs and spaces of the string
     Char string [] = "Madam, Madam, I'm! Adam"
     Check if the string is a palindrome with the new rule.

10. Make it work – char * strchar (char * string, char letter)
    - The function receives a string [] and a char letter and looks for the first appearance of the letter in the string
    - If found, the function returns its location otherwise null

11. You are given a string char string [] = ".."
    Find the letter that appears the most in the string.

12. You are given a string char string [] = ".."
    which contains letters ('A'...'Z','a'...'z')
    Numbers (0..9) and signs (':',';','!','.') and spaces.
    Find the char that appears the most in the string.

13. You are given 3 strings
    Char target[?], source1 [] = ".." , source2 []=".."
    Merge the words from source1 and 2 to target
    (char at a time from each string)
    Unknown the length of the strings.

14. You are given 2 strings
    Char first [] = ".." char second [] = ".."
    Check if the second array appears in the end of the first array.

15. Char * strpbrk (char * string1, char * string2) library has a function strpbrk which
    scans the first string and searches in it for the second string returning a pointer to its
    location.
    Without the use of string.h write your version of strpbrk.

16. You are given a string char string [] = ".."
    Count the number appearances in the string.
    Note : count numbers not digits.

17. You are given a string char string [] = ".."
    Containing two number and a math operator between them.
    Calculate the result.

18. You are given a string string [] = ".."
    Containing a number written with letters:
    "two hundred and twenty three"
    The sentence contains the following words:
    "….ninety, twenty, nineteen, eleven, ten,….,one
    Thousand, hundred, billion, million,…
    Calculate the number.