Assignment 06

DeadLine:19ᵗʰ January , 2016

cctype header:

Purpose of this Assignment is to explore cctype and cstring library
Following are functions of cctype library

isalpha Returns true (a nonzero number) if the argument is a letter of the alphabet. Returns 0 if the argument is not a letter.

isalnum Returns true (a nonzero number) if the argument is a letter of the alphabet or a digit. Otherwise it returns 0.

isdigit Returns true (a nonzero number) if the argument is a digit from 0 through 9. Otherwise it returns 0.

islower Returns true (a nonzero number) if the argument is a lowercase letter. Otherwise, it returns 0.

isupper Returns true (a nonzero number) if the argument is an uppercase letter. Otherwise, it returns 0.

isspace Returns true (a nonzero number) if the argument is a whitespace character. Whitespace characters are any of the following:

space'' vertical tab '\v'

newline'\n' tab'\t'

Otherwise, it returns 0.

toupper Returns the uppercase equivalent of its argument.

tolower Returns the lowercase equivalent of its argument.

Task-01:

First include <cctype.h> file then call all above functions of <cctype> in main function.

Task-02:

Without including <cctype.h> file write your own custom functions as above then test these functions.

string header:

Following are the functions of C++ string library

strlen Accepts a C-string or a pointer to a C-string as an argument. Returns the length of the C-string (not including the null terminator.)

Example Usage:len = strlen(name);

strcat Accepts two C-strings or pointers to two C-strings as arguments. The function appends the contents of the second string to the first C-string. (The first string is altered, the second string is left unchanged.)

Example Usage:strcat(string1, string2);

strcpy Accepts two C-strings or pointers to two C-strings as arguments. The function copies the second C-string to the first C-string. The second C-string is left unchanged.

Example Usage:strcpy(string1, string2);

strncat Accepts two C-strings or pointers to two C-strings, and an integer argument. The third argument, an integer, indicates the maximum number of characters to copy from the second C-string to the first C-string.

Example Usage: strncat(string1, string2, n);

strncpy Accepts two C-strings or pointers to two C-strings, and an integer argument. The third argument, an integer, indicates the maximum number of characters to copy from the

second C-string to the first C-string. If n is less than the length of string2, the null terminator is not automatically appended to string1. If nis greater than the length of

string2,string1 is padded with '\0' characters.

Example Usage: strncpy(string1, string2, n);

strcmp Accepts two C-strings or pointers to two C-strings arguments. If string1and string2 are the same, this function returns 0. If string2is alphabetically greater than string1,it returns a negative number. If string2is alphabetically less than string1, it returns a

positive number.

Example Usage:if (strcmp(string1, string2))

strstr Accepts two C-strings or pointers to two C-strings as arguments. Searches for the first

occurrence of string2in string1. If an occurrence of string2is found, the function returns a pointer to it. Otherwise, it returns a NULL pointer (address 0).

Example Usage:cout << strstr(string1, string2);

Task-03:

First include <string> file then call all above functions of <cctype> in main function.

Task-04:

    Without including <string> file write your own custom functions as above then test these functions.


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   Failure will never overtake me if my
determination to succeed is strong enough.
                Og Mandino
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