C-string functions

#include<string>;

Examples of C-strings are: (1) character array, (2) c-string literal, (3) pointer to char

Definition: A c-string is a sequence of characters stored in adjacent memory locations terminated by a NULL character \[ \"\0\] \]

<table>
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<th>Function</th>
<th>Description</th>
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| strlen   | Accepts a C-string or a pointer to a string as an argument. Returns the length of the string (not including the null terminator).  
*Example Usage:* len = strlen(name); |
| strcat   | Accepts two C-strings or pointers to two strings as arguments. The function appends the contents of the second string to the first string. (The first string is altered, the second string is left unchanged.)  
*Example Usage:* strcat(string1, string2);  
The first argument must be a character array or a pointer to an element in a character array.  
Returns a pointer to string1. |
| strcpy   | Accepts two C-strings or pointers to two strings as arguments. The function copies the second string to the first string. The second string is left unchanged.  
*Example Usage:* strcpy(string1, string2);  
The first argument must be a character array or a pointer to an element in a character array.  
Returns a pointer to string1. |
| strncpy  | Accepts two C-strings or pointers to two strings and an integer argument. The third argument, an integer, indicates how many characters to copy from the second string to the first string. If string2 has fewer than n characters, string1 is padded with \'\0\' characters.  
*Example Usage:* strncpy(string1, string2, n);  
The first argument must be a character array or a pointer to an element in a character array.  
Returns a pointer to string1. |
| strcmp   | Accepts two C-strings or pointers to two string arguments. If string1 and string2 are the same, this function returns 0. If string2 is alphabetically greater than string1, it returns a negative number. If string2 is alphabetically less than string1, it returns a positive number.  
*Example Usage:* if (strcmp(string1, string2)) |
| strncmp  | Accepts two C-strings or pointers to two string arguments and an integer argument. The third argument, an integer, indicates how many characters are to be compared. If string1 and string2 are the same, this function returns 0. If string2 is alphabetically greater than string1, it returns a negative number. If string2 is alphabetically less than string1, it returns a positive number.  
*Example Usage:* if (strcmp(string1, string2, n)) |
| strstr   | Accepts two C-strings or pointers to two C-strings as arguments, searches for the first occurrence of string2 in string1. If an occurrence of string2 is found, the function returns a pointer to it. Otherwise, it returns a NULL pointer (address 0).  
*Example Usage:* cout << strstr(string1, string2); |