

```
1  #include <stdio.h>
2
3  #define MAX_STRING_LENGTH 512
4
5  int main(void)
6  {
7      //function prototype
8      void MyStrcpy(char[], char[]);
9
10     //variable declarations
11     char chArray_Original[MAX_STRING_LENGTH], chArray_Copy[MAX_STRING_LENGTH]; // ↗
12     //code
13
14     // *** STRING INPUT ***
15     printf("\n\n");
16     printf("Enter A String : \n\n");
17     gets_s(chArray_Original, MAX_STRING_LENGTH);
18
19     // *** STRING COPY ***
20     MyStrcpy(chArray_Copy, chArray_Original);
21
22     // *** STRING OUTPUT ***
23     printf("\n\n");
24     printf("The Original String Entered By You (i.e : 'chArray_Original[]') Is : ↗
25     \n\n");
26     printf("%s\n", chArray_Original);
27
28     printf("\n\n");
29     printf("The Copied String (i.e : 'chArray_Copy[]') Is : \n\n");
30     printf("%s\n", chArray_Copy);
31
32     return(0);
33 }
34
35 void MyStrcpy(char str_destination[], char str_source[])
36 {
37     //function prototype
38     int MyStrlen(char[]);
39
40     //variable declarations
41     int iStringLength = 0;
42     int j;
43
44     //code
45     iStringLength = MyStrlen(str_source);
46     for (j = 0; j < iStringLength; j++)
47         str_destination[j] = str_source[j];
48
49     str_destination[j] = '\0';
50 }
```

```
51
52 int MyStrlen(char str[])
53 {
54     //variable declarations
55     int j;
56     int string_length = 0;
57
58     //code
59     // *** DETERMINING EXACT LENGTH OF THE STRING, BY DETECTING THE FIRST
    OCCURENCE OF NULL-TERMINATING CHARACTER ( \0 ) ***
60     for (j = 0; j < MAX_STRING_LENGTH; j++)
61     {
62         if (str[j] == '\0')
63             break;
64         else
65             string_length++;
66     }
67     return(string_length);
68 }
69
```