

```
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     A Character Array Is A String
13
14     //code
15
16     // *** STRING INPUT ***
17     printf("\n\n");
18     printf("Enter A String : \n\n");
19     gets_s(chArray_Original, MAX_STRING_LENGTH);
20
21     // *** STRING COPY ***
22     MyStrcpy(chArray_Copy, chArray_Original);
23
24     // *** STRING OUTPUT ***
25     printf("\n\n");
26     printf("The Original String Entered By You (i.e : 'chArray_Original[]') Is : ?
27     \n\n");
28     printf("%s\n", chArray_Original);
29
30     printf("\n\n");
31     printf("The Copied String (i.e : 'chArray_Copy[]') Is : \n\n");
32     printf("%s\n", chArray_Copy);
33
34     return(0);
35 }
36
37 void MyStrcpy(char str_destination[], char str_source[])
38 {
39     //function prototype
40     int MyStrlen(char[]);
41
42     //variable declarations
43     int iStringLength = 0;
44     int j;
45
46     //code
47     iStringLength = MyStrlen(str_source);
48     for (j = 0; j < iStringLength; j++)
49         str_destination[j] = str_source[j];
50     str_destination[j] = '\0';
51 }
```

```
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
60         OCCURENCE OF NULL-TERMINATING CHARACTER ( \0 ) ***
61     for (j = 0; j < MAX_STRING_LENGTH; j++)
62     {
63         if (str[j] == '\0')
64             break;
65         else
66             string_length++;
67     }
68     return(string_length);
69 }
```