

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  #define MAX_STRING_LENGTH 512
5
6  int main(void)
7  {
8      //function prototype
9      int MyStrlen(char *);
10
11     //variable declarations
12     char *chArray = NULL; //Character Array Can Be Represented By A char pointer to Mark The Base Address (char *)
13     int iStringLength = 0;
14
15     //code
16     printf("\n\n");
17     chArray = (char *)malloc(MAX_STRING_LENGTH * sizeof(char));
18     if (chArray == NULL)
19     {
20         printf("MEMORY ALOCATION TO CHARACTER ARRAY FAILED !!! EXITTING NOW... \n\n");
21         exit(0);
22     }
23
24     // *** STRING INPUT ***
25     printf("Enter A String : \n\n");
26     gets_s(chArray, MAX_STRING_LENGTH);
27
28     // *** STRING OUTPUT ***
29     printf("\n\n");
30     printf("String Entered By You Is : \n\n");
31     printf("%s\n", chArray);
32
33     // *** STRING LENGTH ***
34     printf("\n\n");
35     iStringLength = MyStrlen(chArray);
36     printf("Length Of String Is = %d Characters !!!\n\n", iStringLength);
37
38     if (chArray)
39     {
40         free(chArray);
41         chArray = NULL;
42     }
43
44     return(0);
45 }
46
47 int MyStrlen(char *str)
48 {
49     //variable declarations
50     int j;
51     int string_length = 0;
52
53     //code
54     // *** DETERMINING EXACT LENGTH OF THE STRING, BY DETECTING THE FIRST
```

```
    OCCURENCE OF NULL-TERMINATING CHARACTER ( \0 ) ***
55     for (j = 0; j < MAX_STRING_LENGTH; j++)
56     {
57         if (*(str + j) == '\0')
58             break;
59         else
60             string_length++;
61     }
62     return(string_length);
63 }
64
```