

```
1  #include <stdio.h>
2
3  #define MAX_STRING_LENGTH 512
4
5  int main(void)
6  {
7      //function prototype
8      int MyStrlen(char[]);
9      void MyStrcpy(char[], char[]);
10
11     //variable declarations
12     char chArray[MAX_STRING_LENGTH]; // A Character Array Is A String
13     int iStringLength;
14     int i;
15     int word_count = 0, space_count = 0;
16
17     //code
18
19     // *** STRING INPUT ***
20     printf("\n\n");
21     printf("Enter A String : \n\n");
22     gets_s(chArray, MAX_STRING_LENGTH);
23
24     iStringLength = MyStrlen(chArray);
25
26     for (i = 0; i < iStringLength; i++)
27     {
28         switch (chArray[i])
29         {
30             case 32: //32 IS THE ASCII VALUE FOR SPACE (' ') CHARACTER
31                 space_count++;
32                 break;
33             default:
34                 break;
35         }
36     }
37
38     word_count = space_count + 1;
39
40     // *** STRING OUTPUT ***
41     printf("\n\n");
42     printf("String Entered By You Is : \n\n");
43     printf("%s\n", chArray);
44
45     printf("\n\n");
46     printf("Number Of Spaces In The Input String = %d\n\n", space_count);
47     printf("Number Of Words In The Input String = %d\n\n", word_count);
48
49     return(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
```