```c
#include <stdio.h>

#define MAX_STRING_LENGTH 512

int main(void)
{
    //function prototype
    int MyStrlen(char[]);

    //variable declaraions

    // *** A 'STRING' IS AN ARRAY OF CHARACTERS ... so char[] IS A char ARRAY AND HENCE, char[] IS A 'STRING' ***
    // *** AN ARRAY OF char ARRAYS IS AN ARRAY OF STRINGS !!! ***
    // *** HENCE, char[] IS ONE char ARRAY AND HENCE, IS ONE STRING ***
    // *** HENCE, char[][] IS AN ARRAY OF char ARRAYS AND HENCE, IS AN ARRAY OF STRINGS ***

    //Here, the string array can allow a maximum number of 10 strings (10 rows) and each of these 10 strings can have only upto 15 characters maximum (15 columns)
    char strArray[10][15] = { "Hello!", "Welcome", "To", "Real", "Time", "Rendering", "Batch", "(2020-21)", "Of", "ASTROMEDICOMP." }; //IN-LINE INITIALIZATION
    int iStrLengths[10]; //1D Integer Array - Stores lengths of those strings at corressponding indices in 'strArray[]' e.g: iStrLengths[0] will be the length of string at strArray[0], iStrLengths[1] will be the length of string at strArray[1]...10 strings, 10 lengths...
    int strArray_size;
    int strArray_num_rows;
    int i, j;

    //code
    strArray_size = sizeof(strArray);
    strArray_num_rows = strArray_size / sizeof(strArray[0]);

    //Storing in lengths of all the strings...
    for (i = 0; i < strArray_num_rows; i++)
        iStrLengths[i] = MyStrlen(strArray[i]);

    printf("\n\n");
    printf("The Entire String Array : \n\n");
    for (i = 0; i < strArray_num_rows; i++)
        printf("%s ", strArray[i]);

    printf("\n\n");
    printf("Strings In The 2D Array : \n\n");

    //Since, char[][] is an array of strings, referencing only by the row number (first []) will give the row or the string
    //The Column Number (second []) is the particular character in that string / row
```

```
42      for (i = 0; i < strArray_num_rows; i++)
43      {
44          printf("String Number %d => %s\n\n", (i + 1), strArray[i]);
45          for (j = 0; j < iStrLengths[i]; j++)
46          {
47              printf("Character %d = %c\n", (j + 1), strArray[i][j]);
48          }
49          printf("\n\n");
50      }
51      return(0);
52  }
53
54  int MyStrlen(char str[])
55  {
56      //variable declarations
57      int j;
58      int string_length = 0;
59
60      //code
61      // *** DETERMINING EXACT LENGTH OF THE STRING, BY DETECTING THE FIRST
          OCCURENCE OF NULL-TERMINATING CHARACTER ( \0 ) ***
62      for (j = 0; j < MAX_STRING_LENGTH; j++)
63      {
64          if (str[j] == '\0')
65              break;
66          else
67              string_length++;
68      }
69      return(string_length);
70  }
71
```