

```
1  #include <stdio.h>
2  int main(void)
3  {
4      //variable declaraions
5      int iArray[3][5]; // 3 ROWS (0, 1, 2) AND 5 COLUMNS (0, 1, 2, 3, 4)
6      int int_size;
7      int iArray_size;
8      int iArray_num_elements, iArray_num_rows, iArray_num_columns;
9      int i, j;
10
11     //code
12     printf("\n\n");
13
14     int_size = sizeof(int);
15
16     iArray_size = sizeof(iArray);
17     printf("Size Of Two Dimensional ( 2D ) Integer Array Is = %d\n\n",      ?
18         iArray_size);
19
20     iArray_num_rows = iArray_size / sizeof(iArray[0]);
21     printf("Number of Rows In Two Dimensional ( 2D ) Integer Array Is = %d\n\n", ?
22         iArray_num_rows);
23
24     iArray_num_columns = sizeof(iArray[0]) / int_size;
25     printf("Number of Columns In Two Dimensional ( 2D ) Integer Array Is = %d\n    ?
26         \n", iArray_num_columns);
27
28     iArray_num_elements = iArray_num_rows * iArray_num_columns;
29     printf("Number of Elements In Two Dimensional ( 2D ) Integer Array Is = %d\n    ?
30         \n", iArray_num_elements);
31
32     printf("\n\n");
33     printf("Elements In The 2D Array : \n\n");
34
35     // ***** PIECE-MEAL ASSIGNMENT *****
36     // ***** ROW 1 *****
37     iArray[0][0] = 21;
38     iArray[0][1] = 42;
39     iArray[0][2] = 63;
40     iArray[0][3] = 84;
41     iArray[0][4] = 105;
42
43     // ***** ROW 2 *****
44     iArray[1][0] = 22;
45     iArray[1][1] = 44;
46     iArray[1][2] = 66;
47     iArray[1][3] = 88;
48     iArray[1][4] = 110;
49
50     // ***** ROW 3 *****
51     iArray[2][0] = 23;
52     iArray[2][1] = 46;
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```
49     iArray[2][2] = 69;
50     iArray[2][3] = 92;
51     iArray[2][4] = 115;
52
53     // *** DISPLAY ***
54     for (i = 0; i < iArray_num_rows; i++)
55     {
56         printf("***** ROW %d *****\n", (i + 1));
57         for (j = 0; j < iArray_num_columns; j++)
58         {
59             printf("iArray[%d][%d] = %d\n", i, j, iArray[i][j]);
60         }
61         printf("\n\n");
62     }
63
64     return(0);
65 }
66
67
```