```c
#include <stdio.h>
int main(void)
{
    //variable declaraions
    int iArray[5][3] = { {1, 2, 3}, {2, 4, 6}, {3, 6, 9}, {4, 8, 12}, {5, 10, 15} }; //IN-LINE INITIALIZATION
    int int_size;
    int iArray_size;
    int iArray_num_elements, iArray_num_rows, iArray_num_columns;

    //code
    printf("\n\n");

    int_size = sizeof(int);

    iArray_size = sizeof(iArray);
    printf("Size Of Two Dimensional ( 2D ) Integer Array Is = %d\n\n", iArray_size);

    iArray_num_rows = iArray_size / sizeof(iArray[0]);
    printf("Number of Rows In Two Dimensional ( 2D ) Integer Array Is = %d\n\n", iArray_num_rows);

    iArray_num_columns = sizeof(iArray[0]) / int_size;
    printf("Number of Columns In Two Dimensional ( 2D ) Integer Array Is = %d\n\n", iArray_num_columns);

    iArray_num_elements = iArray_num_rows * iArray_num_columns;
    printf("Number of Elements In Two Dimensional ( 2D ) Integer Array Is = %d\n\n", iArray_num_elements);

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

    // *** ARRAY INDICES BEGIN FROM 0, HENCE, 1ST ROW IS ACTUALLY 0TH ROW AND 1ST COLUMN IS ACTUALLY 0TH COLUMN ***

    // *** ROW 1 ***
    printf("****** ROW 1 ******\n");
    printf("iArray[0][0] = %d\n", iArray[0][0]); // *** COLUMN 1 *** (0th Element) => 1
    printf("iArray[0][1] = %d\n", iArray[0][1]); // *** COLUMN 2 *** (1st Element) => 2
    printf("iArray[0][2] = %d\n", iArray[0][2]); // *** COLUMN 3 *** (2nd Element) => 3

    printf("\n\n");

    // *** ROW 2 ***
    printf("****** ROW 2 ******\n");
    printf("iArray[1][0] = %d\n", iArray[1][0]); // *** COLUMN 1 *** (0th Element) => 2
```

```
43      printf("iArray[1][1] = %d\n", iArray[1][1]); // *** COLUMN 2 *** (1st Element) ➥
           => 4
44      printf("iArray[1][2] = %d\n", iArray[1][2]); // *** COLUMN 3 *** (2nd Element) ➥
           => 6
45
46      printf("\n\n");
47
48      // *** ROW 3 ***
49      printf("****** ROW 3 ******\n");
50      printf("iArray[2][0] = %d\n", iArray[2][0]); // *** COLUMN 1 *** (0th Element) ➥
           => 3
51      printf("iArray[2][1] = %d\n", iArray[2][1]); // *** COLUMN 2 *** (1st Element) ➥
           => 6
52      printf("iArray[2][2] = %d\n", iArray[2][2]); // *** COLUMN 3 *** (2nd Element) ➥
           => 9
53
54      printf("\n\n");
55
56      // *** ROW 4 ***
57      printf("****** ROW 4 ******\n");
58      printf("iArray[3][0] = %d\n", iArray[3][0]); // *** COLUMN 1 *** (0th Element) ➥
           => 4
59      printf("iArray[3][1] = %d\n", iArray[3][1]); // *** COLUMN 2 *** (1st Element) ➥
           => 8
60      printf("iArray[3][2] = %d\n", iArray[3][2]); // *** COLUMN 3 *** (2nd Element) ➥
           => 12
61
62      printf("\n\n");
63
64      // *** ROW 5 ***
65      printf("****** ROW 5 ******\n");
66      printf("iArray[4][0] = %d\n", iArray[4][0]); // *** COLUMN 1 *** (0th Element) ➥
           => 5
67      printf("iArray[4][1] = %d\n", iArray[4][1]); // *** COLUMN 2 *** (1st Element) ➥
           => 10
68      printf("iArray[4][2] = %d\n", iArray[4][2]); // *** COLUMN 3 *** (2nd Element) ➥
           => 15
69
70      printf("\n\n");
71
72      return(0);
73  }
74
75
```