```c
#include <stdio.h>
int main(void)
{
    //variable declaraions

    //IN-LINE INITIALIZATION
    int iArray[5][3][2] = { { { 9, 18 }, { 27, 36 }, { 45, 54 } },
                            { { 8, 16 }, { 24, 32 }, { 40, 48 } },
                            { { 7, 14 }, { 21, 28 }, { 35, 42 } },
                            { { 6, 12 }, { 18, 24 }, { 30, 36 } },
                            { { 5, 10 }, { 15, 20 }, { 25, 30 } } };
    int int_size;
    int iArray_size;
    int iArray_num_elements, iArray_width, iArray_height, iArray_depth;
    int i, j, k;

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

    int_size = sizeof(int);

    iArray_size = sizeof(iArray);
    printf("Size Of Three Dimensional ( 3D ) Integer Array Is = %d\n\n",
      iArray_size);

    iArray_width = iArray_size / sizeof(iArray[0]);
    printf("Number of Rows (Width) In Three Dimensional ( 3D ) Integer Array Is =
      %d\n\n", iArray_width);

    iArray_height = sizeof(iArray[0]) / sizeof(iArray[0][0]);
    printf("Number of Columns (Height) In Three Dimensional ( 3D ) Integer Array
      Is = %d\n\n", iArray_height);

    iArray_depth = sizeof(iArray[0][0]) / int_size;
    printf("Depth In Three Dimensional ( 3D ) Integer Array Is = %d\n\n",
      iArray_depth);

    iArray_num_elements = iArray_width * iArray_height * iArray_depth;
    printf("Number of Elements In Three Dimensional ( 3D ) Integer Array Is = %d\n
      \n", iArray_num_elements);

    printf("\n\n");
    printf("Elements In Integer 3D Array : \n\n");

    for (i = 0; i < iArray_width; i++)
    {
        printf("****** ROW %d ******\n", (i + 1));
        for (j = 0; j < iArray_height; j++)
        {
            printf("****** COLUMN %d ******\n", (j + 1));
            for (k = 0; k < iArray_depth; k++)
            {
```

```
48                  printf("iArray[%d][%d][%d] = %d\n", i, j, k, iArray[i][j][k]);
49              }
50              printf("\n");
51          }
52          printf("\n\n");
53      }
54
55      return(0);
56  }
57
58
```