

ys\03-Simple2DArrayWithPointers\02-ColumnMemoryAllocation_Two

C:\MyProjects\rtr05-213\03_Assignments\upload13 part01\14-Pointers\03-Arrays\07-TwoDimensionalArrays\03-Simple2DArrayWithPointers\02-ColumnMemoryAllocation_Two>cl.exe /c /EHsc /I \include ColumnMemoryAllocation_Two.cpp

Microsoft (R) C/C++ Optimizing Compiler Version 19.36.32537 for x64

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ColumnMemoryAllocation_Two.cpp

C:\MyProjects\rtr05-213\03_Assignments\upload13 part01\14-Pointers\03-Arrays\07-TwoDimensionalArrays\03-Simple2DArrayWithPointers\02-ColumnMemoryAllocation_Two>link.exe ColumnMemoryAllocation_Two.obj

Microsoft (R) Incremental Linker Version 14.36.32537.0

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C:\MyProjects\rtr05-213\03_Assignments\upload13 part01\14-Pointers\03-Arrays\07-TwoDimensionalArrays\03-Simple2DArrayWithPointers\02-ColumnMemoryAllocation_Two>ColumnMemoryAllocation_Two.exe

*****First Memory Allocation to 2D Integer Array*****

Memory Allocation to Row 0 of 2D Integer Array Succeed !!!

Memory Allocation to Row 1 of 2D Integer Array Succeed !!!

Memory Allocation to Row 2 of 2D Integer Array Succeed !!!

Memory Allocation to Row 3 of 2D Integer Array Succeed !!!

Memory Allocation to Row 4 of 2D Integer Array Succeed !!!

Displaying 2D Array :

iArray[0][0] = 1

iArray[0][1] = 2

iArray[0][2] = 3

iArray[1][0] = 2

iArray[1][1] = 4

iArray[1][2] = 6

```
iArray[1][0] = 2  
iArray[1][1] = 4  
iArray[1][2] = 6
```

```
iArray[2][0] = 3  
iArray[2][1] = 6  
iArray[2][2] = 9
```

```
iArray[3][0] = 4  
iArray[3][1] = 8  
iArray[3][2] = 12
```

```
iArray[4][0] = 5  
iArray[4][1] = 10  
iArray[4][2] = 15
```

Memory Allocated to the Row of 4 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 3 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 2 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 1 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 0 of 2D Integer Array has been successfully Freed!!!

*****Second Memory Allocation to 2D Integer Array*****

Memory Allocation to Row 0 of 2D Integer Array Succeed !!!

Memory Allocation to Row 1 of 2D Integer Array Succeed !!!

Memory Allocation to Row 2 of 2D Integer Array Succeed !!!

*****Second Memory Allocation to 2D Integer Array*****

Memory Allocation to Row 0 of 2D Integer Array Succeed !!!

Memory Allocation to Row 1 of 2D Integer Array Succeed !!!

Memory Allocation to Row 2 of 2D Integer Array Succeed !!!

Memory Allocation to Row 3 of 2D Integer Array Succeed !!!

Memory Allocation to Row 4 of 2D Integer Array Succeed !!!

Displaying 2D Array :

```
iArray[0][0] = 1
iArray[0][1] = 2
iArray[0][2] = 3
iArray[0][3] = 4
iArray[0][4] = 5
iArray[0][5] = 6
iArray[0][6] = 7
iArray[0][7] = 8
```

```
iArray[1][0] = 2
iArray[1][1] = 4
iArray[1][2] = 6
iArray[1][3] = 8
iArray[1][4] = 10
iArray[1][5] = 12
iArray[1][6] = 14
iArray[1][7] = 16
```

```
iArray[2][0] = 3
iArray[2][1] = 6
iArray[2][2] = 9
iArray[2][3] = 12
iArray[2][4] = 15
```

```
iArray[2][1] = 6  
iArray[2][2] = 9  
iArray[2][3] = 12  
iArray[2][4] = 15  
iArray[2][5] = 18  
iArray[2][6] = 21  
iArray[2][7] = 24
```

```
iArray[3][0] = 4  
iArray[3][1] = 8  
iArray[3][2] = 12  
iArray[3][3] = 16  
iArray[3][4] = 20  
iArray[3][5] = 24  
iArray[3][6] = 28  
iArray[3][7] = 32
```

```
iArray[4][0] = 5  
iArray[4][1] = 10  
iArray[4][2] = 15  
iArray[4][3] = 20  
iArray[4][4] = 25  
iArray[4][5] = 30  
iArray[4][6] = 35  
iArray[4][7] = 40
```

Memory Allocated to the Row of 4 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 3 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 2 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 1 of 2D Integer Array has been successfully Freed!!!

Memory Allocated to the Row of 0 of 2D Integer Array has been successfully Freed!!!