



# Java Multi-Dimensional Arrays

[< Previous](#)[Next >](#)

## Multidimensional Arrays

A multidimensional array is an array of arrays.

To create a two-dimensional array, add each array within its own set of **curly braces**:

### Example

```
int[][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };
```

**myNumbers** is now an array with two arrays as its elements.

To access the elements of the **myNumbers** array, specify two indexes: one for the array, and one for the element inside that array. This example accesses the third element (2) in the second array (1) of myNumbers:

### Example

```
int[][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };  
int x = myNumbers[1][2];
```

```
System.out.println(x); // Outputs 7
```

Try it Yourself »

We can also use a **for loop** inside another **for loop** to get the elements of a two-dimensional array (we still have to point to the two indexes):

## Example

```
public class Main {  
    public static void main(String[] args) {  
        int[][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };  
        for (int i = 0; i < myNumbers.length; ++i) {  
            for(int j = 0; j < myNumbers[i].length; ++j) {  
                System.out.println(myNumbers[i][j]);  
            }  
        }  
    }  
}
```

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## Test Yourself With Exercises

### Exercise:

Insert the missing part to create a two-dimensional array.

```
myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };
```

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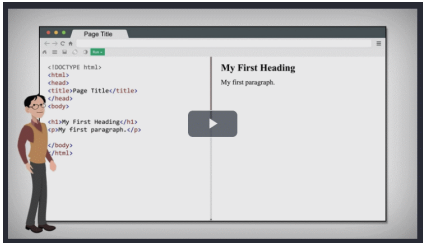
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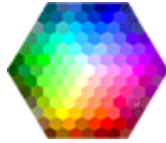
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