

IT 179

Two-Dimensional Arrays



🌐 When poll is active, respond at **pollev.com/abdelmounaam190**

📱 Text **ABDELMOUNAAM190** to **37607** once to join

[If necessary] Have you watched the video: Using Visual Studio Code with Java?

Yes

No

Powered by  **Poll Everywhere**

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

When poll is active, respond at pollev.com/abdelmounaam190

Text **ABDELMOUNAAM190** to **37607** once to join

Have you watched the video: Two Dimensional Arrays in java

Yes

No

Powered by  **Poll Everywhere**

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

Two-Dimensional Arrays - Example

7


Movie ratings by multiple reviewers.

- ▣ Each **row** is a different reviewer
- ▣ Each **column** is a different movie

row *col*

↓ ↓

`rating[0][2] = 2`
`rating[1][3] = 8`

rating 

movie (*second index*)

	0	1	2	3
reviewer 0	4	6	2	5
1 (<i>first index</i>)	7	9	4	8
2	6	9	3	7

Review

8

```
int[] [] numbers = new int[2][3];
```

		Row Index		
Column Index		0	1	2
	0	0	42	3
	1	6	6	-33

Length of a 2D Arrays

9

```
int[][] rating = new int[3][7];
```

- What is `rating.length`?
- What is `rating[0].length`?

Example

Declare an array of characters to hold multiple choice answers for up to 10 questions for up to 5 students.

Let's Try This

```
char [ ] [ ] answers;  
answers = new char [5] [10];
```

More Practice

Write a method that accepts three array parameters:

- the one we declared in the previous problem
- a char array
- an integer array.

The method should also accept the number of students, and the number of questions.

Using the character array as the key for the exam, score each student's exam and store the resulting score in the appropriate slot in the integer array. Each problem is worth 2 points.

Visual Studio Code

12

- VSC available to you:
 - ▣ vdi.it.ilstu.edu
 - ITLab-Pool

```
int SumRow(int i) {  
}
```

```
int SumCol(int j) {  
}
```