Lesson 19
Two Dimensional Arrays
Two Dimensional Arrays

Arrays

Store one type of data

Indexed from 0 to length - 1

Used to store large amounts of data
Two Dimensional Arrays

When you need to store a table of data

Creates an array of arrays
Two Dimensional Arrays

To Create:

```java
int grid [][] = new int [4] [3];
```

Creates an array with 4 rows and 3 columns
Two Dimensional Arrays

Row - Major

Means that the row comes first

```java
int grid [][] = new int [8] [4];
```

8 rows and 4 columns
Two Dimensional Arrays

Use for loops

```java
for (int r = 0; r < grid.length; r++) {
    for (int c = 0; c < grid[0].length; c++) {
        System.out.print(grid[r][c] + " \t");
    }
    System.out.println();
}
```

Use a for loop for the rows and the columns.