This is the twenty-ninth day of the Software 1 Eight Week Challenge, and the first day of your fifth week.

Your assignment is to read Sierra and Bates Chapter 5, UCertify Chapter 3. Here are some additional references on arrays:

Here are some references on two dimensional arrays and a little more:

<http://www.homeandlearn.co.uk/java/multi-dimensional_arrays.html>

<http://www.java-samples.com/showtutorial.php?tutorialid=265>

<http://www.dummies.com/how-to/content/java-use-arrays-with-two-dimensions-or-more.html>

<https://www.youtube.com/watch?v=dj15BrhCHIc>

[http://pkris001.freeshell.org/OCA.pdf Section 4.3](http://pkris001.freeshell.org/OCA.pdf%20Section%204.3)

Here are some great analogies from this resource: <http://programmers.stackexchange.com/questions/246718/how-does-the-fourth-dimension-work-with-arrays>

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| 13down vote | In programming, arrays are quite easy to implement, but maybe not to understand.  Generally, each level of arrays means to have the content n-fold. That means   * int x[4] are 4 blocks, each of them containing an int. * int x[5][4] are 5 blocks, each of them containing an int[4]. * int x[3][5][4] are 3 blocks, each of them containing an int[5][4]. * int x[2][3][5][4] are 2 blocks, each of them containing an int[3][5][4].   How you are referring to them is up to you, but for better understanding, you have something like   * COLUMN for the last one * ROW for the second-last one * PAGE for the third-last one   Till here, I read it somewhere. In order to stay here, we can as well define   * BOOK for the fourth-last one * and maybe SHELF for the fifth-last one. (Or, if you prefer, SHELFROW so that we can continue.)   That said, I never saw array with more than 4 or maybe 5 dimensions in "wild life".  This way, you can define and imagine int x[6][2][3][5][4] as a collection of 6 "shelves", each having 2 books, each having 3 pages, each having 5 rows, each having 4 columns. |

And

When dealing with finite arrays, it's easy to find space.

Imagine a sheet of paper with a grid printed on it; you can write some information in each cell of the grid. That's a 2D array: row and column.

Put several of those sheets of paper in a file folder; that's a 3D array: page, row, and column.

Put several of those folders in a file box. 4D array: folder, page, row, column.

Arrange boxes in a rectangular grid on a wooden pallet. 6D array: box-row, box-column, folder, page, row, column.

Stack more grids of boxes on top of those. 7D array: box-depth, box-row, box-column, folder, page, row, column.

Start cramming pallets into a shipping container: 9D array. (Assuming each stack is as tall as the inside of the container, so you can only get 2 more dimensions here.)

Stack up shipping containers on the deck of a container ship: 12D array.

Your fleet of container ships is now a 13D array.