* What is an array? Give an example of an array.

Java arrays allows us to store multiple values of the same type as a single collection.

Why would this be useful? As an example, suppose we were a bank and wanted to keep track of the bank balances of our customers.

We could create a separate variable for each customer's balance: double balance0, double balance1... but this becomes unmanageable really fast.

Instead we could put all the values together into an array, which is represented as a single variable.

Then it wouldn't matter if we had a 100 customers, or a million; this single array can hold these values.

* There are 2 ways to declare and initialise an array. What are they and how do they work?

First Way

A screenshot of a computer

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A screenshot of a computer code

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Second way –

A screenshot of a computer

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* What types of loops can we use? Give an example of each.

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* Study the Breakout.java example from the slides (it's also listed in the previous page). How does it work? Make sure you understand it.