

# Week 10 - Collections part 1

## Topics covered in this week

- Arrays vs. collection objects
- Lists
- Sets
- generic arrays
- equals vs. hashCode (complete version)

## Reading material

- <https://beginnersbook.com/java-collections-tutorials/>
- <https://www.journaldev.com/1260/collections-in-java-tutorial>
- <https://www.vogella.com/tutorials/JavaCollections/article.html>
- <https://www.journaldev.com/21095/java-equals-hashcode>

## Homework

	Problem	Notes
EASY	<p>Create a class Country containing two attributes: Name and Capital, both Strings.</p> <ul style="list-style-type: none"><li>• Make it comparable so that the comparison only cares about the country's name. Fill an ArrayList with objects of your class. Demonstrate using tests that sorting works properly.</li><li>• Now extend the current solution (without touching the code written for the previous bullet) that only cares about the capital and demonstrate that sorting works properly. Perform a binary search for the country whose capital is Paris. (Don't forget about the test)".</li></ul>	