# Cairo Crash Course

## Ownership - Exercise 4

In this exercise we are going to use Arrays with spans.

**Reminder:** A span is a snapshot of an array that allows us to iterate over its elements.

#### **Contract Implementation**

In the ownership\_exercise\_4.cairo file, complete the function multiply\_elements(my\_array: @Array<u32>) -> u32:

- 1. The function creates a span of my\_array parameter.
- 2. Then it multiplies all its elements (using the span) returning the result.

#### **Tests**

In the test\_ownership\_4.cairo file inside the test\_multiplication():

- Create an array numbers: Array<u32> with [1,2,3,4,5,6,7,8,9] as elements.
- Create a snapshot of <a href="numbers">numbers</a> in the variable <a href="my\_snapshot">my\_snapshot</a>.
- Append the number 10 to the original numbers array.
- Invoke the multiply\_elements function passing my\_snapshot as parameter.
- Assert the final result make sure the returned number is correct.

### Useful links

**Arrays** 

Ownership

References and Snapshots