Welcome.TU.Code

Arrays

indexOf / charAt

- int indexOf(char character)
  - Returns the first position of character in the string

- char charAt(int index)
  - Returns the character of the given position in the string

replace / replaceAll

- String replace(char oldChar, char newChar)
  - Replaces all occurrences of oldChar with newChar

- String replaceAll(String regex,String replacement)
  - Replaces all occurrences of regex with replacement

substring

- String substring(int beginIndex)
  - Returns the content of the string starting with beginIndex
- String substring(int beginIndex, int endIndex)
  - Returns the string between beginIndex and endIndex
  - beginIndex is inclusive
  - endIndex is exclusive
- "Hello World".substring(1,4)   => ???

Arrays – Here we go!

- Ordered Set of Objects
- Example:
    - [1,2,3,4,5]
    - ["Fish","Cat","Dog"]
- Array of:
    - Strings
    - Int
    - Bool
    - Etc.

Initializing Arrays

- Two different ways of initialization
  - New Operator
  - Curly Braces

```
//Create new Array
String[] myPets;
myPets = new String[5];
```

```
//Create new Array
String[] myHobbies = {"Swimming", "Climbing", "Football"};
```

Accessing Elements

- Access via index
  - myArray[i]
  - i → Index in Array
  - Starts with 0

- For loop
  - To count elements use myArray.length

Exercises 1

- Create a function with an int parameter
  - Parameter name "length"
- The function returns an array
  - With the length of the parameter
- Hint:
  - int[] myArray = makeNumberArray(3);
  - Result
    - myArray = [1, 2, 3];

Exercise 2

- Sum all integers inside an Array
- The function returns an integer
- Hint:
  - Int mySum = sumNumbers({1, 2, 3});
  - Result
    - mySum = 6;

That's it – thanks!