Arrays

Learning objectives

- Creating and using arrays
- Looping over an array with the for-each loop

Arrays

- A normal variable store a single value
- Storing multiple values would require a separate variable for each value
- Arrays are special variables that store multiple values in a single variable
- Each value is stored in an element in the array
- Each element is accessed by an index (starting at zero)

Demo 1 - Arrays

- Creating an array
- Using an array
- Using the index in an array

Arrays

- An array consists of the elements and the property length
- length tells the number of elements in an array
- The length of an array is set when it is created and can never change
- The Arrays class has convenience methods for handling arrays

Demo 2 - Arrays

- The length property
- Using methods in the class Arrays for convenience

Looping over an array

- The for loop could easily be used to access all elements by using the index of the loop to access elements

- The for each loop is a special kind of loop for iterating over an array

Demo 3 - Looping over arrays

- The for loop
- The for each loop

Exercise 1 - Revert an array

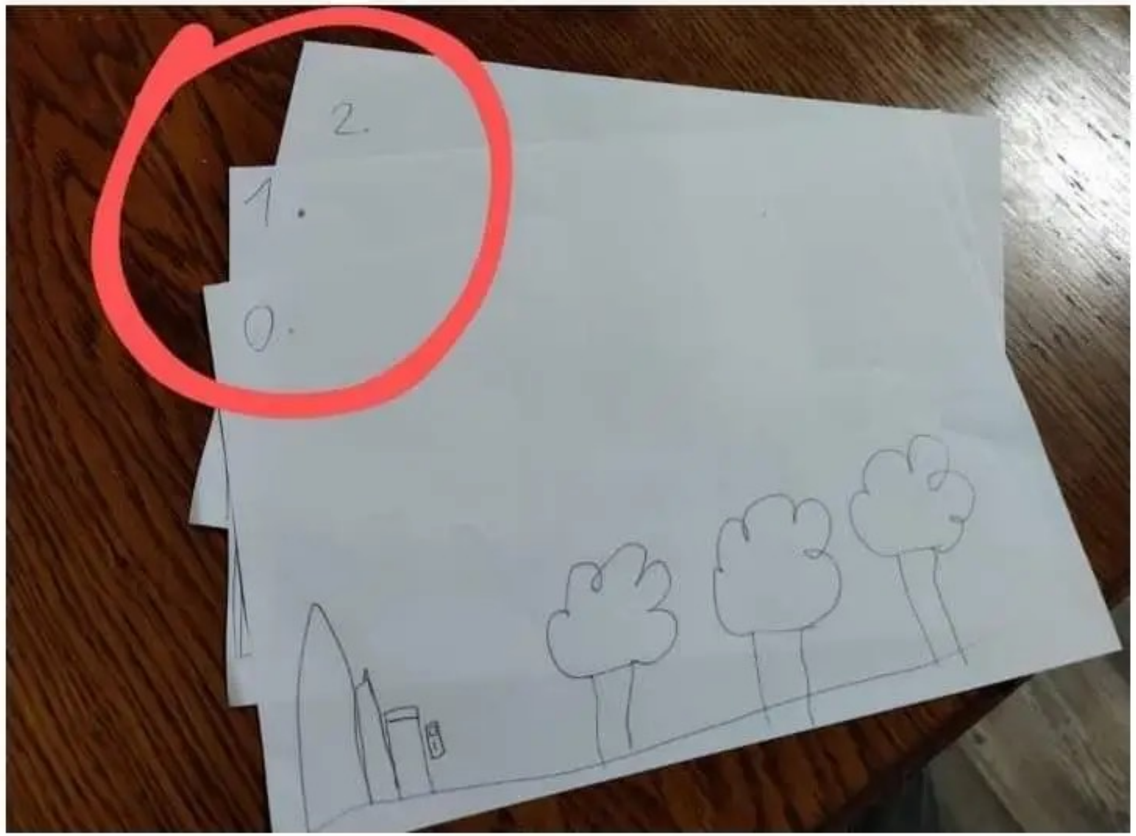
- Given this original int array: 1,2,3,4,5,6,7,8,9
- Create a program that takes the original array and creates a reverses array that looks like this: 9,8,7,6,5,4,3,2,1
- Print both arrays to the console

Exercise 2 - Lowest, highest, sum, average

- Given an int array that looks like this: 56,13,84,7,11,21,79
- Create a program that calculate and prints:
- The lowest value
- The highest value
- The sum of all the values
- The average of all the values

Indexes in Java start with…

This is how my 7yo son numbered his drawings ... I've never been more proud



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