## w1\_d2\_c1: Variable declaration and initialization

- 1. Using the console, create several variables using different letter cases and beginning characters. Check if they still exist if you refer to them in different case does case matter here? Try to declare a variable starting with number as the first character.
- 2. Save a string (text) describing your current mood in a variable and print it out in console.
- 3. Feel free to play around in the console and get familiar with it.

## W1\_d2\_c2: Arithmetic operators

- 4. Play around in the console: add, subtract, multiply and divide some numbers. Use numbers stored in variables you created as well. Think about expressions: 3-2-31, 3\*5-7/3, 4/2-1.14\*3. Why do we get these results?
- 5. How many grams weight 1.2kg of bananas?
- 6. How many extra seconds we wait for our friend Anna who is being late for 5 minutes? What about Tom who is being late half an hour? It is hard to be on time these days...
- 7. How many MB of additional memory we have if we buy a 4GB USB stick? How many news articles each in size 98KB can fit in it?
- 8. Create a variable <code>yearOfBirth</code> containing your year of birth. Check what's the difference between <code>yearOfBirth</code> + 1 and <code>yearOfBirth++</code>. Can you use the similar principle with any other operator?
- 9. Do you know any other way to write a = a \* 2? How about: b = b + 3; c = c / 5; d = d 7?
- 10. Create the following variables:
  - a variable containing your name,
  - a variable containing your age,
  - a variable describing if you have a cat or not.
- \* Each variable has to start with a different type of character. Print them all out in the console and check their types.
- 11. Check which type are these values:
  - "number"
  - true
  - null
  - "false"
  - 56

## w1\_d2\_c3: Logical operators

- 12. Check how good you are at guessing the Boolean equivalent of different values using the console. Do you remember how to check for a Boolean equivalent of a value?
- 13. Use the console to check the results you think should go in the following table:

р	q	p && q	p    q
true	true		
true	false		
false	true		
false	false		

- 14. If the variable *age* stores the information about user's age, how we can check whether it contains a correct value? Can age be a negative value? Do we expect it to be greater than 120?
- 15. Let's say there are speed limitations on a motorway from 60 to 120 kilometers per hour. If we store the current speed value in the variable *speed* how we can check if we drive safely?