Exercise 1

As we have already figured out, there are 3 types of functions: function expression, function declaration and arrow function.

First of all, let's practice creating them. The task is simple, you need to create 3 functions of 3 different types. Their name should be the following getName1, getName2, getName3.

Functions must meet the following conditions:

1 name parameter must be passed to each of these functions.

Each function must return the value “Name equals name”, where name is the value of the name parameter passed to the function.

After you need to call each function and print the value returned from it to the console.

Task 2

You need to create a getSumOfNumbers function. Select any type of function when creating.

getSumOfNumbers takes 2 parameters: number and type. The number parameter is the number by which the sum will be calculated. That is, if the number 10 was passed, then the function should calculate the sum from 0 to 10 (0 + 1 + 2 + ... + 10). The type parameter is responsible for selecting numbers for calculating the sum. It can be 3 values: “odd”, “even” and “”. If type is “odd”, then only odd numbers should be included in the sum, “even” - even numbers, empty string “” - all numbers. By default, the type parameter must be equal to odd.

The getSumOfNumbers function must return the total with return.

Possible results of the getSumOfNumbers function:

number = 10, type = 'odd'. Returns 25.

number = 10, type = 'even'. Returns 30.

number = 10, type = ''. Returns 55.

Task 3

You need to create a getDivisors function that takes a single number parameter. By default, it should be 1.

This function returns the number of divisors for number. If number is less than zero or is not an integer (can be checked using the Number.isInteger(number) function), then display the message “number must be an integer and greater than zero!” in the modal window using alert.

Examples:

getDivisors(4) = 3 // 1, 2, 4

getDivisors(5) = 2 // 1, 5

getDivisors(12) = 6 // 1, 2, 3, 4, 6, 12

getDivisors(30) = 8 // 1, 2, 3, 5, 6, 10, 15, 30

Task 4

Remember how, in the strings theme, we formatted the values that the user enters into the text field? So, imagine that we have 10 text fields for which we need to do the same formatting. Is it that you have to write the same code 10 times? Of course not, because we have functions.

Often functions are needed in order to implement some kind of logic (for example, string formatting) and not copy and paste it several times. Consider the examples below.

Without function:

console. log('Hi, Maxim!');

console. log('You are 20 years old!');

console.log('Hi, Igor!');

console.log('You are 25 years old!');

console.log('Hello, Anastasia!');

console.log('You are 28 years old!');

With function:

const getInfo = (name, age) => {

console.log(`Hi, ${name}!`);

console. log(`You are ${age} years old!`);

}

getInfo('Maxim', 20);

getInfo('Igor', 25);

getInfo('Anastasia', 28);

I think you understand that the function example is more convenient to use and reduces the amount of repetitive code.

Now your task is to create a checkQuestionAnswer function that takes 2 parameters: question and correctAnswer. The question parameter is the question that will be asked to the user and will be passed as a parameter to the prompt function. correctAnswer is the correct answer to the question.

You need to get the value the user enters into the text field and check it against the correctAnswer parameter. If the user gave the correct answer, then display in the modal window via alert the message “The answer is correct”, otherwise - “The answer is incorrect”.

Also, if the user enters the given string “apple”, and the correctAnswer parameter is equal to “apple”, then the answer should be counted as correct. That is, the answer should not depend on the case of characters and on the number of spaces at the beginning and at the end of the answer.

When you create a function, call this code to test it:

checkQuestionAnswer('Is the watermelon a fruit or a berry?', 'A berry');

checkQuestionAnswer('How many teeth does an average adult have?', '32');

checkQuestionAnswer('What is the name of the smallest bird in the world?', 'Hummingbird');