**Вопросы 💎**

1. Какие кавычки можно использовать для создания строк в JS и в чем разница между ними?

A string can be any text within **inverted commas**. Both **single and double quotes** can be used:

var carname = 'Volvo XC60';

var carname = 'Volvo XC60';

You can use inverted commas inside a string as long as they **don't match** the inverted commas around the string:

var answer1 = 'Her name is 'Masha';

var answer2 = "Her name is 'Masha'; ``;

And you can also use a third kind of quote, **the back-quote**. If we use back quotes, we can insert arbitrary expressions into such a string, wrapping them in **${...}**:

function sum(a, b) {

return a + b;

}

alert(`1 + 2 = ${sum(1, 2)}`); // 1 + 2 = 3

1. Какими методами можно найти подстроку в строке? Приведите пример.

The first method is **str.indexOf**(substr, pos).

It looks for substring substr in string str, starting from position pos, and returns position where the match is located, or -1 if there is no match.

let str = 'Widget with id';

alert( str.indexOf('Widget') ); // 0, потому что подстрока 'Widget' найдена в начале

alert( str.indexOf('widget') ); // -1, совпадений нет, поиск чувствителен к регистру

alert( str.indexOf("id") ); // 1, подстрока "id" найдена на позиции 1 (..idget with id)

An optional second argument allows you to start the search at a certain position.

For example, the first occurrence of "id" is at position 1. To find the next one, start the search at position 2:

let str = 'Widget with id';

alert( str.indexOf('id', 2) ) // 12

There is also a similar method **str.lastIndexOf**(substr, position), which searches from the end of a string to its start.

It is used when you want to get the last occurrence: before the end of the string or starting before (inclusive of) a certain position.

The `**search()`** method works in a similar way - it also searches for strings based on a given value and returns a match position:

var str = "I live in Moscow";

var pos = str.search("Moscow");

The difference is that the `search()` method can take much more powerful search values (regular expressions).

1. Самостоятельно разберитесь, зачем нужен специальный символ [\\n](file:///\\n)?

Multi-line strings can also be created using single and double quotes, using the so-called "line feed character", which is written as \n:

let guestList = "Guests:\n \* John\n \* Pete\n \* Mary";

alert(guestList); // список гостей, состоящий из нескольких строк

1. Напишите код, который делает первый символ заглавным. Например, "настя" ⇒ "Настя"

ucFirst("настя") == " Настя";

let newStr = str[0].toUpperCase() + str.slice(1);

OR

function ucFirst(str) {

if (!str) return str;

return str[0].toUpperCase() + str.slice(1);

}

alert( ucFirst("настя ) ); // Настя

1. Как создать дату 24 января 2021 года, 22 часа 51 минута? Временная зона – местная.

let date = new Date(2021, 0, 24, 22, 51);

alert( date );

1. Как посчитать, сколько секунд осталось до завтра?

function getSecondsToTomorrow() {

let now = new Date();

// завтрашняя дата

let tomorrow = new Date(now.getFullYear(), now.getMonth(), now.getDate()+1);

let diff = tomorrow - now; // разница в миллисекундах

return Math.round(diff / 1000); // преобразуем в секунды

}

OR

function getSecondsToTomorrow() {

let now = new Date();

let hour = now.getHours();

let minutes = now.getMinutes();

let seconds = now.getSeconds();

let totalSecondsToday = (hour \* 60 + minutes) \* 60 + seconds;

let totalSecondsInADay = 86400;

return totalSecondsInADay - totalSecondsToday;

}

1. Как выделить из строки с денежной суммой (например, *120р.* или *99€*) только цифры, т.е. *120 и 99*?

var str = "120p.";

var res = str.slice(1, 3); //120

OR

function extractCurrencyValue(str) {

return +str.slice(-2);

}

1. Зачем нужны функции join и split?

A string can be converted to an array with the **split()** method.

A typical task for this function is to divide an address into parts (country, city, etc.) by commas or a first name by spaces.

The reverse action (make up a string from an array) is the **join** function.

1. Какой из вариантов округления делает это по математическим правилам?

Math.round(параметр)

1. Как сгенерировать случайное число от 1 до 100?

let numberRandom = Math.round((Math.random()\*100));

document.write("Случайное число равно " + numberRandom.toString());

1. Зачем нужна функция str.trim() ?

removes spaces at the beginning and end of a line.

1. Что такое флаг?

Regular expressions may have flags that affect the search.

There are only 6 of them in JavaScript:

**i**

With this flag the search is case-insensitive: no difference between A and a (see the example below).

**g**

With this flag the search looks for all matches, without it – only the first match is returned.

**m**

Multiline mode

**s**

Enables “dotall” mode, that allows a dot . to match newline character \n

**u**

Enables full Unicode support. The flag enables correct processing of surrogate pairs.

**y**

“Sticky” mode: searching at the exact position in the text