**Variables**

|  |  |
| --- | --- |
| To create a variable |  |
| To use a keyword |  |
| Equal sign |  |
| To set (assign) a value |  |
| Lowercase (uppercase) |  |
| To increase (decrease) a value |  |
| To contain a number |  |
| Using (with the help of) |  |
| Letters, numbers, punctuation, and spaces |  |
| Sequence of characters |  |
| Quotes |  |
| To enter / to type |  |
| Double quotation mark (double quotes) |  |
| Single quotes |  |
| To join values |  |

Variables in JavaScript

JavaScript lets you give names to values using *variables*. You can think of a variable as a box where you can put one thing. If you put something else in it, the first thing goes away. To create a new variable, use the keyword var (let, const). A *keyword* is a word that has special meaning in JavaScript. To give the variable a value, use the equal sign:

let age = 12;

Setting a value is called *assignment* (we are assigning the value *12* to the variable *age*). The standard practice is to start the names of variables with a lowercase letter, so it’s common to capitalize each word except for the first one, like this: numberOfCandies. It’s called camelCase.

As a programmer, you’ll often need to increase or decrease the value of a variable containing a number by 1. Increasing by 1 is called *incrementing*, and decreasing by 1 is called *decrementing*. You increment and decrement using the operators ++ and --.

Strings in JavaScript (as in most programming languages) are just sequences of characters, which can include letters, numbers, punctuation, and spaces. We put strings between quotes, so JavaScript knows where they start and end. For example, here’s a classic:

"Hello world!";

To enter a string, just type a double quotation mark ("), put the text and then close the string with another double quote. You can also use single quotes (').

What if you put a number between quotes? Is that a string or a number? In JavaScript, it’s a string. For example:

let numberNine = 9;

let stringNine = "9";

*numberNine* is a number, and *stringNine* is a string. Let’s try adding them together:

numberNine + numberNine;

18

stringNine + stringNine;

"99"

When we add the number values 9 and 9, we get 18. But when we use the + operator on "9" and "9", the strings are simply joined together to form "99".

|  |  |
| --- | --- |
|  | Создать переменную |
|  | Поддерживать код |
| To increase a value |  |
|  | Вернуть функцию |
| To use single quotes |  |
|  | Задать значение |
|  | Использовать нижний регистр |
|  | Переменная содержит число |
| To use a keyword |  |
| To join values |  |
| Equal sign |  |
|  | Невалидные данные |
| Sequence of characters |  |
|  | Объединить строки |

Answer the questions

1. What are variables?
2. What do you use when you want to create a new variable?
3. Which sign do you use to give the variable a value?
4. How should you write the names of variables?
5. Which operators do you use for increasing/decreasing the value of a variable?
6. What are strings?
7. How do you enter a string?
8. If we put a number between quotes will it be a string or a number?
9. What is concatenation?