

Assignment 3: Javascript 1

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1

The 3 ways to declare variables are with 'var', 'const' or 'let'.

2

'var' should be avoided because of its scoping. They are scoped to the immediate function body which can easily cause errors if not careful.

3

Use camel-casing, use clear and descriptive names, start with a letter. Global variables and constants are written in uppercase.

4

When using + between number types it will add them. When used between strings or a string and a number then it will concatenate the operands.

5

It returns the modulo(remainder of dividing left operand by right) of two operands.

6

the == operator doesn't consider the type of operands when checking for equality. The === operator does.

7

When an operation requires a number(maybe a number in a specific range) but an operand of a different type(or number but outside of required range) is passed.

8

You can do it a number of ones but using ++ or -- is most common.

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Prefixing returns the number before increment/decrement but post-fixing returns the number after increment/decrement.

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It refers to the order operators are parsed and executed in. In Javascript this goes grouping, left to right, etc.

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With `console.log()`.

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`t` attempts to turn it into a numeric type.

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The types are: Undefined, Null, Boolean, Number, BigInt, String, Symbol, Object

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Objects

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They both represent variables without a value however null are more certain. Undefined just represent that they as of now have not been set a value.

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All are more or less the same however with back-ticks string concatenations work slightly differently and can write multiline without using new line character.

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String interpolation.

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back-tick

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With `${expression}$` in the string.

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With `\.`.

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If `start` `stop` then `substring` will swap the two arguments, `slice` will return empty string. If either argument is negative or `Nan`, it is treated as a 0 with `substring`. With `slice` and `substr`, if `start` is negative sets char from end of string. With `slice`, If `stop` is negative sets char from end of string also except bounded at 0. For `substr` the second argument is a length from start position.

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There are the or operator `||`, the and operator `&&` and the negation operator `!`.

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They are `<`, `>`, `<=`, `>=`, `==`, `===`, `!=`, `!==`.

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The falsy values are values that Boolean operations interpret as false. Truthy values are values that Boolean operations interpret as true.

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The falsy values are: `false`, `0`, `-0`, `""`, `null`, `undefined`, `NaN`. All other values are truthy.

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They are operators that use Boolean types as operands.

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`if/else` or `if else` followed by code encapsulate in curly brackets.

28

```
switch (expr) { case a: operation; default: return "happy"; }
```

29

```
expr ? trueOutput : falseOutput;
```

30

Nesting is writing something within something else.

31

Encapsulating pieces of code that do a certain task.

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You can do it by writing the function keyword followed by name of function, list of parameters and statements that define the functions enclosed in curly brackets. You can also define a variable and assign it to a function which will include all the previously mentioned parts for the function (name isn't always necessary since variable has name). There are also arrow functions defined by `params => expression`.

33

Functions assigned to variables.

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It is when variables declared in function, only are accessible within that function.

35

The values returned by functions.

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They are functions which only have parameters and an operation to enact on these parameters.