

# JS noter

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January 2023

## 1 variables

Datatypes: undefined, null, boolean, string, symbols, number and object

### 1. **var**

var number = 15

var is going to be used throughout the whole program.(if global)

### 2. **let**

let number = 10

let will only be used inside the scope of where the variable is declared.

### 3. **const**

const pi = 3.14

const is a variable that is unchangeable.

## 1.1 Declaring variables

Variables are case sensitive. **declare variable** var a; or var a

**assign variable** a = 7;

**declare and assign** var b = 2;

console.log(a)

### 1.1.1 numbers

var subtraction = 45 - 33;

var multiply = 8 \* 10;

var divide = 66 / 33;

var increment = increment -; or increment ++;

var float = 5.7;

var multiply = 5.3 \* 7.5;

var modulus remainder 11 % 3;

```
var a += 12
var b /= 12; divides by 12.
```

### 1.1.2 Strings

```
var name = "Max";
var occupation = "baller";
escape character string: var myStr = "I am a \"double quoted string\yeet"
A string can be made with single quotes, which makes it easier with " inside or
back ticks '.
```

#### addition strings

```
var string = "i come first. ";
string += "i come seconds. ";
```

```
var name = "max";
var string = "Ny name is" + name + " and i am yeet"
```

#### length of string

```
var string = "balls";
length = string.length;
```

#### indexing of string

```
var string = yeet;
firstletter = string[0];
```

strings er immutable som betyder at man ikke kan ændre et enkelt bogstav.

### 1.1.3 Arrays

Any datatype can be added into an array.

```
var array = ["Max", 23]
```

#### nested array, multidimensional array

```
var array = ["yeet", 23, yeet];
```

#### accessing arrays

```
var array = [20,30,50];
var items = array[0];
```

#### modify arrays

```
var array = [20,30,50];
array[0] = 10;
dermed bliver det 10,30,50.
```

#### **accessing multidimensional arrays**

```
var array = [["yeet", 23], yeet];  
var data = array[0][0];
```

#### **appending and removing from array**

```
var array = [1,2,3,4]  
array.push(5)  
array.pop(5)  
array.shift(), removes the first element  
array.unshift(0) adds an element into the first index
```

#### **multidimensionl array**

```
var array = [["eggs", 3],["balls", 2]]
```

#### **1.1.4 Scopes and variables**

variables delcared outside of functions are global.

variables defined inside a function without a var keyword is global.

Local scope: only visable inside the scope.

## **2 Chapter 2. Lexical Structure**