

Introcution to JavaScript

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Discord

<https://discord.gg/W3QJrBwD6Z>



What learned we last Week?

- Variables `let x = 1`
- Data Types `number` , `string` , `boolean` , `null` , `undefined`
- Conversion between data types `Number()` , `String()` , `Boolean()`
- Operators `+` , `-` , `*` , `/` , `%`
- Debugging with `console.log()`
- Comments `//` and `/* */`
- Testing with `npm run test [name]`

Tipp: Dont forget to commit and push your changes

Goals of this week

- Comparing values
- Conditional Statements
- Loops
- Logical Operators

Loose Comparison

```
1 == 1 // true
```

```
1 == 2 // false
```

```
1 != 1 // false
```

```
1 != 2 // true
```

```
1 < 2 // true
```

```
1 > 2 // false
```

```
const isEqual = 11 == 10 // isEqual = false
```

When comparing two values of different types, JavaScript will try to convert one type into the other type.

```
1 == "1" // true
0 == false // true

"false" != true // false
1 != true // false
```

Strict Comparison

```
1 === 1 // true
```

```
1 === 2 // false
```

```
1 !== 1 // false
```

```
1 !== 2 // true
```

```
1 < 2 // true
```

```
1 > 2 // false
```

```
const isEqual = 11 === 10 // isEqual = false
```

Tipp: Use strict comparison whenever possible

Conditional Statements

```
if (condition) {  
    // do something  
} else if (condition) {  
    // do something else  
} else {  
    // do something else  
}
```

Example

```
const x = 1
if (x === 1) {
    console.log("x is 1")
} else if (x === 2) {
    console.log("x is 2")
} else {
    console.log("x is not 1 or 2")
}
```

Logical Operators

`&& // and`

`|| // or`

`! // not`

Example

```
const x = 1
const y = 2
if (x === 1 && y === 2) {
    console.log("x is 1 and y is 2")
}

if (x === 1 || y === 2) {
    console.log("x is 1 or y is 2")
}

if (!(x === 1)) {
    console.log("x is not 1")
}
```

Loops

```
while (condition) {  
    // do something  
}
```

```
do {  
    // do something  
} while (condition)
```

```
for (let i = 0; i < 10; i++) {  
    // do something  
}
```

Example

```
let i = 0
while (i < 10) {
  console.log(i)
  i++
}

for (let i = 0; i < 10; i++) {
  console.log(i)
}
```

Exercise

Link will be posted on Discord