Java Script Fundametals - Part1

* values and variables:→

* variable name can't start with anumber.
* It contain only number, letter, underscore or the dollar sign.
* It can't be renamed of reserved keys.

*Data TyPes:→

* what is the difference Between let, const and, var.?

*let:- is used in the situation that may Change variable value later.

* const:- used in the situation that can't be reassigned like Birthyear → must be assigned first.

* var:- is used in Es 6, and it must be avoided due to reasons will be mentioned later

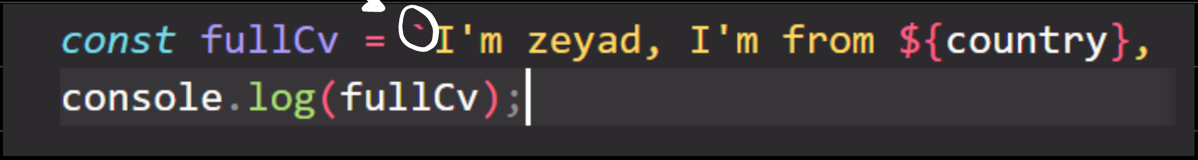
* operator Precedence:→

Check MDN operator Precedence to know more →

↓ higher
lower

String template literals

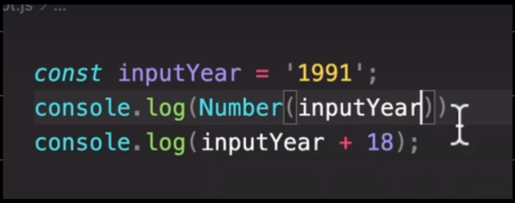
* template literals Can be done using ` `
and the variables Can be inserted using $ { }.



```
const fullCv = `I'm zeyad, I'm from ${country},
console.log(fullCv);
```

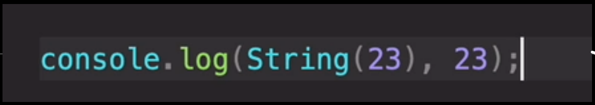
(Type Conversion and Coersion)

Type Conversion



```
const inputYear = '1991';
console.log(Number(inputYear));
console.log(inputYear + 18);
```

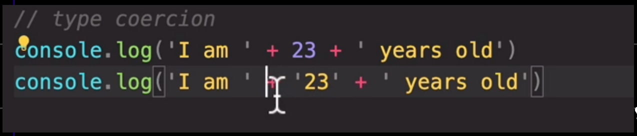
Convert String to a number which allows me do math operations upon it.



```
console.log(String(23), 23);
```

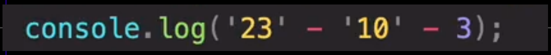
→ String function Converts the input to String

→ Type Coersion: → It means to Convert one Type to another automatically with using any Function



```
// type coercion
console.log('I am ' + 23 + ' years old')
console.log('I am ' + '23' + ' years old')
```

* the + Converts number to string



```
console.log('23' - '10' - 3);
```

the - operator Perform the opposite it Converts the String to a number.

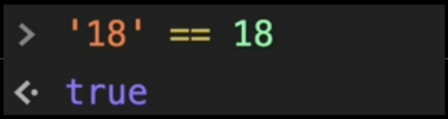
* The next values will be Converted to False:—

0 , ' ' , undefined , null , NaN

These are Called falsy values.

* Equality operator == vs ===

*== Performs type Coersion For example



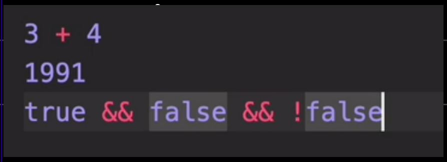
```
> '18' == 18
<· true
```

it Converts string to number then Compare the values.

* === doesn't Perform any Coersion, it must be the exact value and data type.

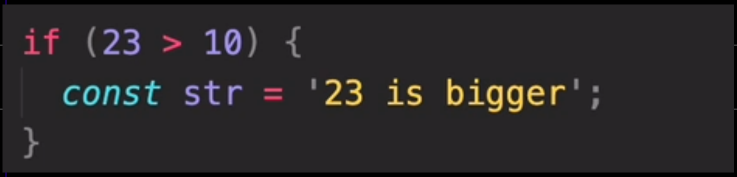
* The difference Between statement and expression

expression:— Produces avalue such as:→



```
3 + 4
1991
true && false && !false
```

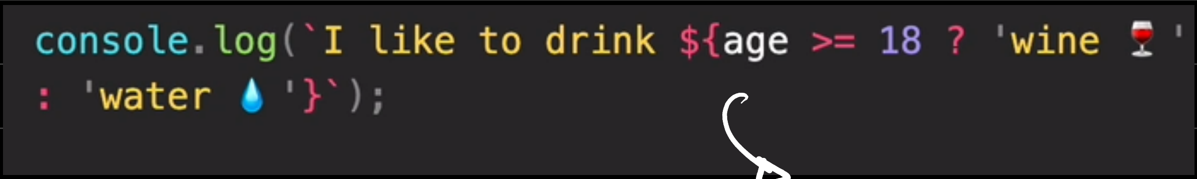
* Statmets :— doesn't produle values but it perform action depend upon Conditions.



```
if (23 > 10) {
  const str = '23 is bigger';
}
```

such as if and Switch cases.

* tenory operators Can be used inside a String literals.



```
console.log(`I like to drink ${age >= 18 ? 'wine 🍷'
: 'water 💧'}`);
```

it is used in `` because it is Considered expression as it returns avalue.