

recap

variables

types of variables -3 types

let, var const.

can I replace the values of let and var --> yes.

what about const---> no (Constant).

console.log()

age

Age

AGE

Javascript is casesensitive

replit, shell--->node filename.js

Types of data

1. Number--1,2,3,4,5


2. String----> "" or " are called strings

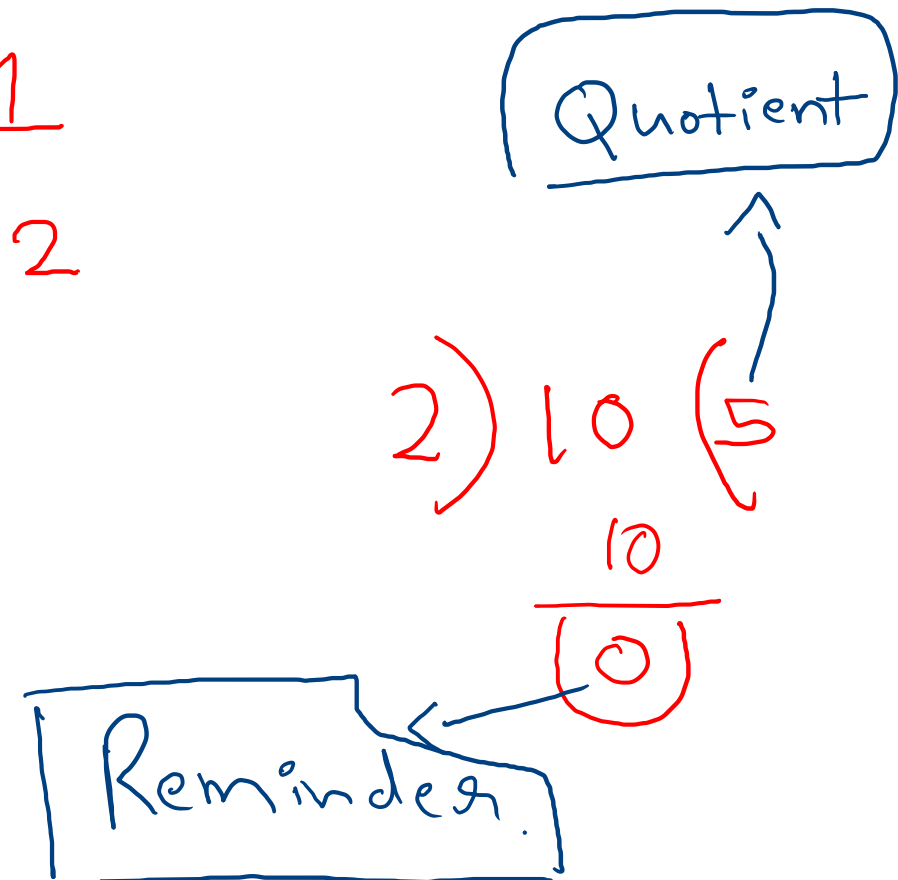
// comment

agenda

Mathematical operators

1. Addition(+).
2. Subtraction (-).
3. Multiplication (*).
4. Division(/).


$$\begin{aligned}1 + 2 &= 3 \\2 - 1 &= \underline{1} \\2 \times 1 &= 2\end{aligned}$$
$$10 / 2 = 5$$


$$\begin{array}{r}2 \overline{) 10} \quad (5 \\ \underline{10} \\ 0\end{array}$$

Quotient

Reminder

JS problem3.js

JS problem3.js

1 let a= 15;

2

3 let b= 5;

4

5

6 console.log((a+b)+ (a+b)+(a+b)+ ((a/b)+(a-b)));

$$15/5$$

$$20 + 20 + 20 + (3 + 10)$$

$$60 + 13$$

$$73$$

Modulo(%)

$$15/2 = 7$$

$$15 \% 2 = 1$$

2) 15 (7 → Quotient

$$\frac{14}{1}$$

$$\boxed{1}$$

→ Remainder

$$\begin{array}{r} 2 \overline{) 10} \underline{10} \\ 0 \end{array}$$

$$10/2 = 5$$

$$10 \% 2 = 0$$

$$3) 7 (2$$

$$\frac{6}{1} \quad 7 \% 3 = 1$$

$$5 \% 2 = 1$$

$$3 \% 9 = 3$$

$$1 \% 3 = 1$$

$$2 \% 2 = 0$$

$$2 / 2 = 1$$

$$2) 2 (1$$

$$\frac{2}{0}$$

$$9) 3 (0$$

$$\frac{0}{3}$$

$$2) 5 (2$$

$$\frac{4}{1}$$

$$3) 1 (0$$

$$\frac{0}{1}$$

1. module take reminder as a result

2. division take quotient as a result.

3. if the left number is less than the right number the result will be left number.

4. modulo cannot have fractional value.

$$\textcircled{1} \% \textcircled{3} = 1$$

$$\textcircled{2} \% \textcircled{5} = 2$$

$$\textcircled{3} \% \textcircled{7} = 3$$

$$\begin{array}{r} 5 \overline{) 20} \\ \underline{20} \\ 0 \end{array}$$

Exponential operator (**)

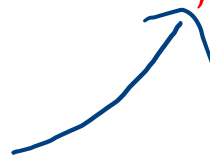
$$\underline{(2)^2} = 2 \times 2 = 4$$

$$2^{**} 2 = 4$$

$$(4)^4 = 4 \times 4 \times 4 \times 4 = \underline{\underline{256}}$$

$$4^{**} 4 = 256$$

$$\underline{(3)^2} = 3 \times 3 = 9$$

$3^{**} 2 = 9$ 

$$(3)^3 = 3 \times 3 \times 3 = 27$$

problem6.js

problem6.js

```
1 let a= 2;  
2  
3 let b= 3;  
4  
5 let c= 2;  
6  
7  
8 console.log(a**b); =>  
9 console.log(b**2);  
10 console.log((a**b)**c);
```

$(a^b)^c$

$(2)^3$
 (2)
8

(8^c)

$(8)^2 \Rightarrow (8)^2 \Rightarrow 64$

Ln 10, Col 24 History

Console Shell

```
~/ftweb27-mathematical$ node problem6  
.js  
8  
9  
64  
~/ftweb27-mathematical$
```

$(2^3) \Rightarrow 2 \times 2 \times 2 \Rightarrow 8$

$b^2 \Rightarrow (b)^2 \Rightarrow (3)^2 \Rightarrow 9$

① $\overset{\text{number}}{\underbrace{1}} + \overset{\text{number}}{\underbrace{2}} \Rightarrow \text{number}$
 $1 + 2 \Rightarrow 3$

$\text{console.log}(\underbrace{"hi"} + \underbrace{"everyone"}) \Rightarrow \underbrace{"hi everyone"}$

② $\underbrace{\text{string}} + \underbrace{\text{string}} \Rightarrow \underbrace{\text{string}}$

③ $\underbrace{\text{number}} + \underbrace{\text{string}} \Rightarrow \underline{\underline{\text{string}}}$

number + number ==> number

concatenation

string + string ==> string.

string + number ==> string

~~number~~ / string