# Number

There are two types of number in JavaScript?

1. With decimal 3.14
2. Without decimal 3

How to write power?

1. 123e5 12300000
2. 123e-5 0.00123

What is the max limit of a number?

15 to 16 numbers = 222222222222222 after that it will show 00 or show nothing

Things to kept in mind while using number?

1. “20” + “20” = 2020
2. “20” + 20 = 2020
3. 20 + “20” = 2020
4. 20 + 20 = 40
5. “20” + 20 + 20 =2040
6. 20 + 20 + “20” = 4020

Use operator to string?

1. “100” – “10” = 90 (JS considered both as a number)
2. “100” / “10” = 10 (JS considered both as a number)
3. “100” \* “10” = 1000 (JS considered both as a number)
4. “100” + “10” = 10010 (JS considered both as a string because of concat sign)

Arithmetic with none arithmetic?

1. 100 / “apple” = NAN
2. 100 + “apple” =100apple

Above all?

* Above all JS considered number as first priority
* If you add number to string then both merge with each other than type = string
* If you perform any operator except + b/w number and string than the result will be = NAN
* If both are numbers but as a string then + will merge them = 100 + 10 = 10010
* If both are numbers but as a string then any operator except + will operate mathematical operation on them
* If use in numbers as a string + then type = String
* If use in numbers as a string -, \*, / type = number

# Methods of Number

What will be the syntax?

* X.method(X)

Methods

1. Number() = String to Number
2. ParseInt() = Give single value
3. parseFloat() = give float value
4. toFixed(x) = use to fixed after point if value is 5 =< then round it and fixed the x value
5. toPercision(x) = 1.255 consist 4 values and I want two then use it and the result will be = 1.3 after 2 values if the value is 5 > then it will round it
6. toFixed() and toPercision() both round the value

# Math

“Don’t use Math constructor in math like let x = new Math()”

# Math Methods

Syntax = Math.methodName(x)

1. Math.round(x) round if value if 5 or 5< the x value 2.54 = 3
2. Math.floor(x) remove point
3. Math.max(x,y,z,….) give the max value
4. Math.min(x,y,z,……) gives the min value
5. Math.sqrt(x) x1/2  4= 22 = 2
6. Math.cbrt(x) x1/2  8= 23 = 2
7. Math.pow(x,y) x = base , y = power
8. Math.abs(-x) gives the positive value
9. Math.random() generate a random number b/w 0 to 1
10. Math.floor(Math.random()\*11) generate a random number b/w 0 to 10

# Break and Continue

1. Use for loops
2. Use for conditions
3. Break or continue the loop if the following condition is satisfied or not.
4. Break means that jump out the loop and stop the loop as give condition is satisfied
5. Continue means that carry on the loop

# Date

“Create a date constructor”

Syntax = new Date()

# Date Methods

* These methods take time from browser

1. getFullYear()
2. getMonth()
3. getDate()
4. getHours()
5. getMinutes()
6. getSecond()
7. getMillisecond()
8. getTime()
9. getDay()
10. getMonth() and getDay() start with “0” and have different method to approach them which you already know

# Switch

switch (new Date().getDay()) {

        case 0:

          console.log("sunday");

          break;

        case 1:

          console.log("monday");

          break;

        case 2:

          console.log("tuesday");

          break;

        case 3:

          console.log("wednessday");

          break;

        case 4:

          console.log("tuesday");

          break;

        case 5:

          console.log("friday");

          break;

        case 6:

          console.log("saturday");

          break;

        default:

          console.log("lol insan");

          break;

      }

Common Case Block

switch (new Date().getDay()) {  
  case 4:  
  case 5:  
    text = "Soon it is Weekend";  
    break;  
  case 0:  
  case 6:  
    text = "It is Weekend";  
    break;  
  default:  
    text = "Looking forward to the Weekend";  
}

If you use conditions and operators

let age = 25;

      switch (true) {

        case (age >= 15 && age <= 20):

          console.log("adult");

          break;

        case (age >= 21 && age <= 30):

          console.log("tenage");

          break;

      }