<!-- ! Number methods -->

1. isFinite
2. isInteger
3. isNaN
4. parseInt
5. parseFloat

1. Number.isFinite(value)

- **Description**:
  Determines whether the provided value is a finite number. This method returns `true` if the value is a finite number, and `false` if it is `Infinity`, `-Infinity`, or `NaN`.

- **Example**:

```
console.log(Number.isFinite(123)); // true
console.log(Number.isFinite(Infinity)); // false
console.log(Number.isFinite('123')); // false
console.log(Number.isFinite(NaN)); // false
```

2. Number.isInteger(value)

- **Description**: Determines whether the provided value is an integer. This method returns `true` if the value is an integer, and `false` if it is not.

- **Example**:

```
console.log(Number.isInteger(123)); // true
console.log(Number.isInteger(123.45)); // false
console.log(Number.isInteger('123')); // false
console.log(Number.isInteger(NaN)); // false
```

3. **Number.isNaN(value)**

   - **Description**: Determines whether the provided value is `NaN` (Not-a-Number). This method is a more robust version of the global `isNaN` function and does not coerce the argument to a number before checking.

   - **Example**:

```
console.log(Number.isNaN(NaN)); // true
console.log(Number.isNaN('NaN')); // false
console.log(Number.isNaN(123)); // false
console.log(Number.isNaN(undefined)); // false
```

4. **parseInt(string)**

   - **Description**:
    Parses a string argument and returns an integer.

   - **Example**:

```
console.log(parseInt('123')); // 123
console.log(parseInt('123abc')); // 123 (ignores 'abc')
console.log(parseInt('abc123')); // NaN
```

5. **parseFloat(string)**

 - **Description**:
`parseFloat` is a JavaScript function that converts a string into a floating-point number.

- **Examples:**

```
parseFloat('3.14');      // 3.14
parseFloat('3.14abc');   // 3.14 (stops parsing when 'a' is encountered)
parseFloat('abc3.14');   // NaN (not a valid number at the start)
parseFloat('   42.5   '); // 42.5 (ignores leading and trailing whitespace)
parseFloat('42.5px');    // 42.5 (stops parsing when 'p' is encountered)
```

```
let num = Number(10)

console.log(num)
console.log(typeof num)



let num2 = Number("10")

console.log(num2)
console.log(typeof num2)   //number


let num3 = Number("10abc")

console.log(num3)        //NaN
console.log(typeof num3)  //number



// !   Number Methods


// ! 1. Number.parseInt()

let num4 = Number.parseInt("10abc")
console.log(num4)


let num5 = Number.parseInt("a4bc10")
console.log(num5)


console.log('----------------------------------------')

// ! how to take input from user => prompt() method

let a = prompt("enter one number")
console.log(a)
console.log(typeof a)

// ! take two numbers from users and add

let b = Number.parseInt( prompt("enter first number"))
let c = Number.parseInt(prompt("enter second number"))

alert(b+c)
```

```
// ! 2. Number.isFinite()


let num6 = 10000000;

let isFinite = Number.isFinite(num6)    // true

console.log(Number.isFinite(2n))    // false (for bigInt)

console.log(isFinite)


console.log(Number.isFinite("hello"))    // false (for string)

console.log('-----------------------------------------------')

// ! 3. Number.isInteger()


let num7 = 1234.98

console.log(Number.isInteger(num7))  // false

console.log(Number.isInteger(2012))  // true

console.log("-----------------------------------")

// !  isNaN()

// only if we pass number then only false , otherwise it will give true

console.log(isNaN(123)) // false

console.log(isNaN("san")) // true
console.log(isNaN(NaN)) // true

console.log(isNaN(2n)) // for bigInt it will give error
console.log("-------------------------------------------------")
```

```
// ! 4 Number.isNaN()

// only for NaN it will give true, otherwise it will give false


console.log(Number.isNaN(123))         // false
console.log(Number.isNaN('santanu'))   // false
console.log(Number.isNaN(NaN))        // true

// !  isNaN() vs Number.isNaN()  *****


console.log("----------------------------------------")


// ! 5. Number.parseFloat()


console.log(Number.parseFloat("10.2x3abc"))  // 10.2
console.log(Number.parseFloat("ab10.2x3abc"))  // NaN
```