

Javascript - 3

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String methods →

- { () ⇒ methods are used here }
if you find parenthesis
- syntax ⇒ String Name . method ()
- methods ⇒ used to perform actions or they are the action that can be performed on objects

trim method →

- remove whitespaces from both ends of string and return new string (new)
- do ~~stone~~ this new string you have to define a new string variable or to assign to this variable

Strings are immutable in JS ⇒

(change)
any method give new string that can assign to others ~~are~~ or to self (this) string but strings are immutable

toUpperCase and toLowerCase →

```
Stringname. toUpperCase ( );  
Stringname. toLowerCase ( );
```

methods with arguments - indexOF →

- Argument is some value that we pass to method
`stringname . method (Argument)`.
- `indexOf()` → Returns the first index of occurrence of some value in string (substring/argument) . or gives -1 if not found.

method chaining →

- use multiple method together by . (dot)
methods are compute Left to Right

slice method →

- Returns a part of original string as a new string

`stringname . slice (start , end) ;`

↓
• `slice (start) ;` ending index not include

go to end of string length

• `slice (- number) ;`

it calculate start index
by $(\text{string.length} - \text{number})$

replace & repeat method →

- search a value in the string and returns a new string with the value replaced.

string name. replace ("old", "new");

only first occurred old changed by new → { Apnaapna apna
college apna apna }

repeat →

- returns a string with number of copies of a string

Stringname. repeat (number);

Array (Data structure) →

- linear collection of things (data)

let arrayname = ["aman", "Shadha", "Rajveer"];

Visualising array →

array =

aman	Shadha	Rajveer
0	1	2

Creating arrays →

array = [num, num, num];

array = ["string", "string"];

array = ["string", num, num];

(mixed)

array[0] → 0th index of array
 array[0][0] → 0 index पर जो value है उसे
 अगर जो 0 index [mostly in string]

array = ["sradha", 28, 90.5];

• array[0] = sradha
 • array[0][0] = s

Arrays are Mutable →

In arrays any index's value can be changed or new index value can be create at any index

Array methods →

Push : add new value at end of array
 Pop : delete last value of array

Change the array not return new

Written in wrong way correct is marked by arrows

Shift ~~X~~ add new at start (return the value also)
 unshift ~~X~~ delete value from start

indexOf ("value") : return index of value if not find return -1

includes ("value") : return true if Found if not found return false

- `Concat('arrayname')` : this is to merge two array
`array1.concat(array2)` : the values of array 2 are put in the last in the array 1 (return new array)

- `reverse()` : change the order of element by reverse them (doesn't return new)

- `slice()` : copy of portion of an array

`slice()` : full copy of array

`slice(4)` : copy after 4th index to end

`slice(start, end)` : copy between start and end (ending index not include)

`slice(-num)` : (4) num elements from last (return new)

- `splice()` : remove / replace / add the elements [doesn't return new]

`splice(num)` : delete all after num index

`splice(num, 2)` : delete 2 after num index

`splice(start index, delete count, new item 1, new item 2, ...)`

: (Insert) replace new item at given start index

(return a array of deleted)
(return old array by changing)

- `sort()`: sort array in order of (ascending / descending) default
 → It works proper on strings or alphabet because it works on unicode theory

array references →

- references means address of memory
- arrays not store the value. they store the address of memory where value is store,
- that's why same value's array are different if we compare them by `==` / `===`.

{ reference variable is created in memory which is array's name and it point the location address of values in memory }

Constant arrays →

- define a constant array by adding `const` keyword
- `const` array's value can be changed because it is not storing value it stores the address
- but we can't assign a array to this and can't completely changed this array

classmate

{ always be remind the reference variable concept in arrays }

Nested arrays →

let arrayname = [[1, 2], [3, 4], [5, 6]] ;

	0,0	0,1	
	1	2	
1,0	3	4	1,1
2,0	5	6	2,1

rows = 3

column = 2