

Array iteration methods:

1) for each: Away -for each method in JS used to iterate over elements in an array, it executes a provided function once for each array element

* Array for each it is used to iterate element in an array by provided function

Ex: $a = [1, 2, 3, 4, 5, 6, 7, 8]$
 $a.forEach(\text{function}(val, i, a))$
{
 $console.log(val);$
}

Val is values in array

i is index values

a is given array $[1, 2, 3, 4, 5, 6, 7, 8]$

Note: It is not consider return it will print undefined
& we can use any function

2) Map: It is used to iterate an array element

and transform the elements

1) It takes three parameters value, index, array

2) It prints the value in array when we use return

Note: When you print the conditions return boolean value.

When you return the condition it return array with boolean values like $[true, false, ...]$

Ex:- $a = [1, 2, 3, 4, 5]$

$b = a.map(function (value, index, array) {$

$\{$
 $\quad c.L (v * 10);$

$\quad \text{return } v * 10;$
 $\})$

$c.L (b);$

Output:-

10

20

30

40

50

$[10, 20, 30, 40, 50]$

3) filter:- It is used to create a new array with all elements that pass certain condition.

* doesn't change original array instead it returns new array containing only the elements for which the provided filtering function returns true.

Ex:- $a = [1, 2, 3, 4, 5]$

$b = a.filter(function (v, i, arr) {$

$\{$
 $\quad c.L (v > 2)$

$\quad \text{return } v > 2;$

$\})$

$c.L (b);$

Output:- true

true

true

$[3, 4, 5]$

Note:- Print condition return boolean values

Return condition it return new array with satisfy condition elements like $[3, 4, 5]$

Simple kms:-

- * It is used to create an array based on a specific condition
- * It doesn't change original array
- * In return it Print the values which are true or which are Satisfying the condition.

Reduce method : Used to reduce the elements of an array to a single value.

Ex: $a = [1, 2, 3, 4, 5, 6, 7, 8, 9]$

$b = a.reduce(\text{function}(acc, v, i, arr))$

{

return $acc + v$;

}, 0)

$c = L(b);$

acc \rightarrow The accumulated value computed from previous iterations.

Output : 45