ANKITA TRIPATHY

JAVASCRIPT ADD ARRAY TO ARRAY

EXAMPLE :

```
let a = [1, 2, 3]
let b = [4, 5, 6]

a.push(b);
```

Output :→ a ⇒ [1, 2, 3, [4, 5, 6]]

but we want a ⇒ [1, 2, 3, 4, 5, 6]

Extend Javascript Array

1. Using concat() Method
2. Using push() Method
3. Using spread operator
4. Using for loop
5. Using Splice() Method

1. Extend array using concat Method :-

SYNTAX :-

```
array.concat (value1, value2, ... valueN)
```

* concat() method merges 2 or more than 2 array-like objects, or any values into a single array.

EXAMPLE :-

```
var arr1 = [1, 2, 3];
var arr2 = [4, 5, 6];
arr1 = arr1.concat (arr2);
console.log (arr1);
```

Output :- [1, 2, 3, 4, 5, 6]

2. Extend array using push method

* The push() method add a new element to the end of an array.

EXAMLE :-

We spread the array in the push method using spread operator.

```
var arr1 = [1, 2, 3]
var arr2 = [4, 5, 6]
arr1.push (...arr2);
console.log (arr1);
```

Output :- [1, 2, 3, 4, 5, 6]

push method is very fast if original array is big and few elements are added.

3. Extend array using spread operator.

* The spread Operator is javascript's new feature to expand an array into a list of arguments.

EXAMPLE :-

```
var arr1 = [1,2,3]
var arr2 = [4,5,6]
arr1 = [...arr1, ...arr2];
console.log (arr1);
```

Output :-

[1,2,3,4,5,6]

4. Extend array using for loop

* for loop can be used to extend an array.

Example :-

```
var arr1 = [1,2,3]
var arr2 = [4,5,6]
for (var i=0; i<arr.length; i++)
arr1.push (arr2[i]);
}
console.log (arr1);
```

Output :-

[1,2,3,4,5,6]

5. Extend array using Splice.

The Splice method can be used to add and remove elements from an array.

SYNTAX :-

Elements to remove

```
arr.splice ( index, howMany, item1, ..., itemx)
```

index → Position where new elements will be added

itemx → New element to add.

EXAMPLE :-

```
Var arr1 = [1,2,3];
var arr2 = [4,5,6];
arr1.splice (arr1.length, 0, arr2);
console.log (arr1);
```

Output :-

[1, 2, 3, 4, 5, 6]