TASK-13

Array methods

1. **slice():** It won't modify the existing array,,it will always return the new array with modified elements
   Eg:
   let arr=[1,2,3,4,5;]
   arr.slice(2);
   console.log(arr)
   Output:
   [1,2,3,4,5]

2. **splice():** it will modify the existing array with remained elements and it will returns a new array with removed elements
   Eg:
   let arr=[1,2,3,4,5;]
   arr.splice(2);
   console.log(arr)
   Output:
   [1,2]

3. **delete():** It will remove the number but space is remains same
   Eg:
   let arr=[1,2,3,4,5;]
   delete.arr[3];
   console.log(arr)
   Output:
   [1,2,3<empty item>,5]

4. **flat():** It is used to flat the multi dimensional array into single dimensional array
   Eg:
   let arr=[1,2,3,[4,5];]
   Let x=arr,flat(3);
   console.log(x)
   Output:
   [1,2,3,4,5]

Search methods in array

1. **indexOf():** It is used to search the element in the array and if the element is available it will returns its index otherwise returns -1
   Eg:
   Let arr=["hi","js","css","react"];

Let x=arr.indexOf("js")
console.log(x)
Output:
1

2. **lastIndexoOf:** it will find the last index of repeating number and it will pass not number present in array then it returns as -1
   Eg:
   Let arr=[1,2,3,3,2,1];
   Let x=arr.LastIndexOf(3)
   console.log(x)
   Output:
   3

3. **includes():** If the searching variable is present it will give to otherwise false
   Eg:
   Let arr=[3,4,1,2,5,3,2,10];
   Let x=arr.includes(10)
   console.log(x)
   Output:
   true

 Iteration methods in array
    in an array while iterating every element if you want to perform a specific task for each and every element then we have to use one function called as callback function

1. **map();** It is one of the method to iterate array element
   Eg:
   Let arr=[1,2,3,4,5]
   Let x=arr.map(function(a,b){
    Return a;
           });
    console.log(x);
   Output:
   [1,2,3,4,5]

TASK-13.1

```
1   // Task-13
2
3   // problem-1
4
5   let arr = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
6   let a = arr.map(function (a) {
7     return a ** 2;
8   });
9   console.log(a);
10
11  // output:[1,4,9,16,25,36,49,64,81,100]
12
13  // problem-2
14
15  let arr2 = ["html", "css", "js", "react", "node", "git", "github"];
16  let str = arr2.map(function (str) {
17    return str.toUpperCase();
18  });
19  console.log(str);
20
21  // output:['HTML','CSS','JS','REACT','NODE','GIT','GITHUB']
22
```