Day 3: JavaScript Arrays + map(), filter(), reduce()

1. Array Basics

```
let fruits = ["apple", "banana", "mango"];
console.log(fruits[0]); // apple
```

2. Looping through array

```
let nums = [1, 2, 3, 4];
for(let i = 0; i < nums.length; i++) {
  console.log(nums[i]);
}</pre>
```

3. map()

```
let numbers = [1, 2, 3];
let doubled = numbers.map((n) => n * 2);
console.log(doubled); // [2, 4, 6]
```

4. filter()

```
let nums = [1, 2, 3, 4, 5];
let even = nums.filter((n) => n % 2 === 0);
console.log(even); // [2, 4]
```

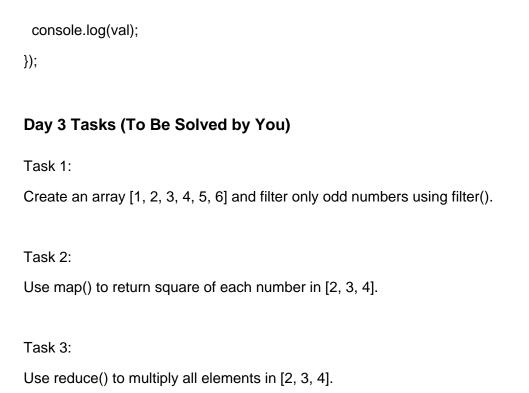
5. reduce()

```
let numbers = [1, 2, 3, 4];
let sum = numbers.reduce((acc, val) => acc + val, 0);
console.log(sum); // 10
```

6. forEach()

```
let arr = [10, 20, 30];
arr.forEach((val) => {
```

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Summary Table

Method Use Case	Returns
map() Modify every element	New Array
filter() Select by condition	New Array
reduce() Combine to one value	Single Value
forEach() Loop only, no return	Nothing