1. Given an array of numbers, return a new array where each number is doubled.

* const numbers = [1, 2, 3, 4, 5];
* console.log(numbers.map(value=>value\*2));

1. Write a function that filters out even numbers from an array.

* const numbers = [10, 15, 20, 25, 30];
* Expected output: [15, 25]
* console.log(numbers.filter(els=>ele%!=0));

1. Given an array of strings, use map to convert each string to uppercase.

* const words = ["apple", "banana", "cherry"];
* console.log(words.map(ele=>ele.toUpperCase()));

1. Use forEach to log each element of an array to the console.

* const items = ["pen", "notebook", "eraser"];
* items. forEach(ele,index,items)=>console.log(ele));

1. Given an array of numbers, use reduce to find the sum of all elements.

* const numbers = [5, 10, 15, 20];
* console.log(numbers.reduce((a,b)=>a+b));

1. Given an array of numbers, use filter to remove odd numbers, then use map to square the remaining numbers.

* const numbers = [1, 2, 3, 4, 5, 6];
* console.log(numbers filter(ele=>ele%2==0).map(ele=>ele\*\*2));

1. Chain map, filter, and reduce to find the sum of squares of only the even numbers.

* const numbers = [1, 2, 3, 4, 5, 6];
* var res = numbers.filter((ele)=>ele%2==0).map(ele)=>ele\*\*).reduce((a,b)=>a+b)
* console.log(res)

1. Given an array of objects representing people, filter out those below 18, then use map to extract their names.

* const people = [  
   { name: "Alice", age: 25 },  
   { name: "Bob", age: 16 },  
   { name: "Charlie", age: 30 }  
  ];
* console.log(people.filter(ele => ele.age<18).map(ele=>ele.name))

1. Given an array of strings, use map and filter to remove empty strings and convert the remaining ones to lowercase.

* const words = ["Hello", "", "WORLD", "JavaScript", ""];
* let employLower=words.filter(ele =>ele!=””).map(ele.toLowerCase())
* console.log(emptyLower)

1. Use reduce to group an array of numbers by even and odd.

const numbers = [1, 2, 3, 4, 5, 6];

Expected output: { even: [2, 4, 6], odd: [1, 3, 5] }