

1. Square the value of every element in the array. Presume that you will only get numbers in the input array.

a. Example

i. Input: -> `const input = [1, 2, 3, 4, 5]`

ii. Output: -> `[1, 4, 9, 16, 25]`;

2. If the given input is an array of numbers, return the sum of all the positive ones. If the array is empty or there aren't any positive numbers, return 0.

a. Example :

input:`const input = [1, -4, 12, 0, -3, 29, -150]`;

Output: 42

3. Find the factorial of

a. 3

b. 5

c. 4

d. 10

4. The following example, which filters out any string which is less than 8 characters

`const words = ['Python', 'Javascript', 'Go', 'Java', 'PHP', 'Ruby']`;

5. Double the value of elements inside the array

a. `[1, 4, 9, 16, 25]`

b. `[21, 0.4, 9, -1.6, 125]`

6. Add suffix to elements inside the array like if element is 1 made is 1st, if element is 2 made it 2nd if element is 3, made it 3rd, others will have th like 4th, 5th, 90th, 51th

a. `[1, 4, 9, 16, 25, 2, 45, 3, 0]`

b. `[21, 0.4, 9, -1.6, 1, 2, 51, 3]`

7. Find the leap year inside the array and create two arrays 1. with all leap years and 2. array without leap year

a. `[2001, 1994, 1999, 2016, 2025, 2028, 2099, 1992]`

b. `[2021, 2004, 2090, 2016, 2125, 2028, 2032, 1972]`

8. Julie loves coding and she knows coding in Python, C++, Java, React and JavaScript. Kindly prepare an array with the above languages for her.

`const words = ['Python', 'Javascript', 'Go', 'Java', 'PHP', 'C++', 'React', 'C', 'RoR', 'Ruby', 'Swift', 'Kotlin', 'LISP']`;

9. Given an array of numbers, return a new array that has only the numbers that are 5 or greater.

`[21, 0.4, 9, -1.6, 12, 5, 81, 94, -9]`

10. Given an array of numbers, return a new array that only includes the even numbers.

a. `[20, 1.4, 92, -1.61, 1.22, 50, 81, 94, -9]`

11. Given an array of strings, return a new array that only includes those that are 5 characters or fewer in length
- `["dog", "wolf", "by", "family", "eaten", "camping"]`
 - `['Python', 'Javascript', 'Go', 'Java', 'PHP', 'C++', 'React', 'C', 'RoR', 'Ruby', 'Swift', 'Kotlin', 'LISP']`
12. Define a function called `cleanNames` that accepts an array of strings containing additional space characters at the beginning and end. The `cleanNames()` function should use the array map method to return a new array full of trimmed names. For example:
- `cleanNames([" avengers", " captain_america", "ironman", " black panther "])`
 - Output:->
`["avengers", "captain_america", "ironman", "black panther"]`
13. Write a function that converts an array of values from miles to kilometers using the map method. In the end, add the kilometers up in a new variable called `"totalDistanceInKilometers"` and return this variable.
- `[1, 2, 3, 4, 5, 6]`
14. Square and sum the array elements using the arrow function and then find the average of the array.
- ```
let nums = [25, 45, 55, 77, 88, 99];
```
- 15.

