

1. Given a sorted array of positive and negative numbers. You have to Square it and sort it.

```
function sortedSquares(array) {  
    let squares = array.map(num => num * num);  
    return squares.sort((a, b) => a - b);  
}  
let input = [-12, -8, -7, -5, 2, 4, 5, 11, 15];  
console.log(sortedSquares(input));
```

2. Design an immutable class with following attributes.

```
function createImmutableEmployee(name, id, dateOfJoining, addresses) {  
    return {  
        getName: () => name,  
        getId: () => id,  
        getDateOfJoining: () => new Date(dateOfJoining), // Return a new  
        copy to prevent modification  
        getAddresses: () => addresses.map(addr => ({ ...addr })), // Return  
        new copies to prevent modification  
    };  
}
```

3. Given an array of Red Green Blue balls.You have to sort it.

```
function sortRGB(arr) {  
    let countB = 0, countG = 0, countR = 0;  
    for (let color of arr) {  
        if (color === 'B') countB++;  
        else if (color === 'G') countG++;  
        else countR++;  
    }  
    return Array(countB).fill('B')  
        .concat(Array(countG).fill('G'))  
        .concat(Array(countR).fill('R'));  
}
```

4. We are given two arrays that represent the arrival and departure times of trains, the task is to find the minimum number of platforms required so that no train waits.

```
function findMinPlatforms(arr, dep) {  
    arr.sort((a, b) => a - b);  
    dep.sort((a, b) => a - b);  
    let platforms = 0, maxPlatforms = 0;  
    let i = 0, j = 0;  
    while (i < arr.length) {  
        if (arr[i] < dep[j]) {  
            platforms++;  
            maxPlatforms = Math.max(maxPlatforms, platforms);  
            i++;  
        } else {  
            platforms--;  
            j++;  
        }  
    }  
    return maxPlatforms;  
}
```