**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;

}