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**FULL STACK DEVELOPMENT COURSE**

**DAY 3 TASK**

1. **Do the below programs in arrow functions.**
2. **PRINT ODD NUMBERS IN AN ARRAY:**

**PROGRAM:**

const printOddNumbers = (arr) => {

arr.forEach((num) => {

if (num % 2 !== 0) {

console.log(num);

}

});};

const numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

console.log("Odd numbers in the array:");

printOddNumbers(numbers);

**Output:**

Odd numbers in the array:

1

3

5

7

9

1. **CONVERT ALL THE STRINGS TO TITLE CAPS IN A STRING ARRAY**

**PROGRAM:**

const stringArray = ["hello world", "how are you", "i am fine"];

const titleCapsArray = stringArray.map(str => {

return str.toLowerCase().split(' ').map(word => {

return word.charAt(0).toUpperCase() + word.slice(1);

}).join(' ');

});

console.log(titleCapsArray);

##### Output:

[ 'Hello World', 'How Are You', 'I Am Fine' ]

1. **SUM OF ALL NUMBERS IN AN ARRAY**

**PROGRAM:**

const sumArray = (arr) => arr.reduce((total, num) => total + num, 0);

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

const sum = sumArray(numbers);

console.log("Sum of all numbers:", sum);

##### Output:

Sum of all numbers: 15

1. **RETURN ALL THE PRIME NUMBERS IN AN ARRAY**

**PROGRAM:**

const isPrime = (num) => {

if (num <= 1) return false;

if (num === 2) return true;

if (num % 2 === 0) return false;

for (let i = 3; i <= Math.sqrt(num); i += 2) {

if (num % i === 0) return false;

}

return true;

};

const findPrimes = (arr) => arr.filter(isPrime);

const numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

const primeNumbers = findPrimes(numbers);

console.log("Prime numbers:", primeNumbers);

##### Output:

Prime numbers: [ 2, 3, 5, 7 ]

1. **RETURN ALL THE PALINDROMES IN AN ARRAY**

**PROGRAM:**

**const isPalindrome = str => {**

**const reversed = str.split('').reverse().join('');**

**return str === reversed;**

**};**

**const findPalindromes = arr => arr.filter(word => isPalindrome(word));**

**const wordsArray = ["level", "radar", "hello", "world", "madam"];**

**const palindromes = findPalindromes(wordsArray);**

**console.log("Palindromes in the array:", palindromes);**

##### Output:

**Palindromes in the array: [ 'level', 'radar', 'madam' ]**