

## EXERCISE - MAPS

- Use *map* to create a new array by changing each course to uppercase in the course array.
  - eg: ['html', 'css', 'js']
  - OP: ['HTML', 'CSS', 'JS']
- Use *map* to create a new array by changing each number to square in the numbers array.
- You have an array of objects with products and their prices. Use the *map* function to create a new array containing the products' names only.
- You have an array of temperatures in Celsius. Use the *map* function to convert each temperature to Fahrenheit using the formula  $(\text{Celsius} * 9/5) + 32$ .
- You have an array of objects representing students with names and ages. Use the *map* function to create a new array of objects with the students' names and their year of birth. Assume the current year is 2023.
  - eg: [{ name: "abc", age: 25 }, { name: "xyz", age: 19 }, { name: "efg", age: 30 }];

## EXERCISE - FILTER

- *Use the **filter** to create a new array containing only even numbers.*
- *Use filter to filter out countries having less than 6 character.*
- *Use filter to filter out country start with 'E';*
- *Create a new array containing only products with prices less than \$10. Suppose you have an array of objects representing products.*
- *You have an array of objects representing employees. Use the **filter** function to create a new array containing only employees who have a salary greater than or equal to \$50,000.*

## EXERCISE - REDUCE

- *Use the reduce function to calculate the sum of all numbers in the array. The out put should be in the array.*
- *You have an array of strings. Use the reduce function to concatenate all strings in the array into a single sentence.*
- *You have an array of objects representing products with prices. Use the reduce function to calculate the total price of all products.*
- *You have an array of transactions where each transaction is an object with a type ("debit" or "credit") and an amount. Use the reduce function to calculate the account balance. Debits reduce the balance, and credits increase it.*
  - *[ { type: "debit", amount: 50 }, { type: "credit", amount: 100 }, { type: "debit", amount: 30 }, ];*