

TEST MERN

JAVASCRIPT

- Provide an example of closure in JavaScript.
- What some function returns in js
- What 'every' function returns in js
- Create a function that takes an array of numbers and return "Boom! " if the digit 7 appears in the array. Otherwise, return "there is no 7 in the array".

```
sevenBoom([1, 2, 3, 4, 5, 6, 7]) → "Boom!"  
// 7 contains the number seven.
```

```
sevenBoom([8, 6, 33, 100]) → "there is no 7 in the array"  
// None of the items contain 7 within them.
```

```
sevenBoom([2, 55, 60, 97, 86]) → "Boom!"  
// 97 contains the number seven.
```

- ```
const arr1 = [
 { "score": 0, "text": "pizza" },
 { "score": 0, "text": "burger" },
 { "score": 0, "text": "paratha" },
 { "score": 0, "text": "samosa" },
 { "score": 0, "text": "other" }
]
const arr2 = ["pizza", "burger", "paratha", "samosa", "paneer"];
Result paneer
Return elements of arr2 which are not present in arr1.text
```
- Write a function to check a string with balanced brackets.  

```
console.log(isBalanced("{[]}")); // Output: true
console.log(isBalanced("{}[]")); // Output: true
console.log(isBalanced("{[]}({[]})")); // Output: true
console.log(isBalanced("(([]))")); // Output: true
```

## React

- Write a custom hook that takes an url and returns fetched data  
Url <https://jsonplaceholder.typicode.com/posts> (use axios get method)

## ExpressJs

- Write mongoose query for “find all users who are over 25 age and are active”
- We want to find the total amount of orders for each user use aggregation for this.

## SQL

- Find the average price of all products form products table
- Write Query to Join Products and Categories with the INNER JOIN keyword Below in sample table with small data

Let's look at a selection of the **Products** table:

| ProductID | ProductName   | CategoryID | Price |
|-----------|---------------|------------|-------|
| 1         | Chais         | 1          | 18    |
| 2         | Chang         | 1          | 19    |
| 3         | Aniseed Syrup | 2          | 10    |

And a selection of the **Categories** table:

| CategoryID | CategoryName | Description                                                |
|------------|--------------|------------------------------------------------------------|
| 1          | Beverages    | Soft drinks, coffees, teas, beers, and ales                |
| 2          | Condiments   | Sweet and savory sauces, relishes, spreads, and seasonings |
| 3          | Confections  | Desserts, candies, and sweet breads                        |

- Write query to Lists the employees that have registered more than 10 orders. Below in sample table with small data

## Demo Database

Below is a selection from the "Orders" table in the Northwind sample database:

| OrderID | CustomerID | EmployeeID | OrderDate  | ShipperID |
|---------|------------|------------|------------|-----------|
| 10248   | 90         | 5          | 1996-07-04 | 3         |
| 10249   | 81         | 6          | 1996-07-05 | 1         |
| 10250   | 34         | 4          | 1996-07-08 | 2         |

And a selection from the "Employees" table:

| EmployeeID | LastName  | FirstName | BirthDate  | Photo      | Notes                       |
|------------|-----------|-----------|------------|------------|-----------------------------|
| 1          | Davolio   | Nancy     | 1968-12-08 | EmpID1.pic | Education includes a BA.... |
| 2          | Fuller    | Andrew    | 1952-02-19 | EmpID2.pic | Andrew received his BTS.... |
| 3          | Leverling | Janet     | 1963-08-30 | EmpID3.pic | Janet has a BS degree....   |