

NoSQL-Mongo Lab2

After Insert Data File (From Folder Aggregation Data)

Notes

- If a **Key** has no value → add any value.
- If test data is missing → insert it before testing.
- **Verify and test** your data, and provide a **justification** for your answer.

Use Robo 3T to create the following: Use **Inventory** Collection or **Order any Collection**

1. Find documents where the "tags" field exists.
2. Find documents where the "tags" field does not contain values "ssl" or "security."
3. Find documents where the "qty" field is equal to 85.
4. Find documents where the "tags" array contains all of the values [ssl, security] using the `\$all` operator.
 - a. **Question:**
If you need to find **only the two values** "ssl" and "security", what change would you make to your query?
5. Update the "item" field in the "paper" document, update "size.uom" to "meter" and using the `\$currentDate` operator.
 - a. Also, use the upsert option (within updateOne) and change filter condition item:"laptopDevice".
 - b. Use the **\$setOnInsert** operator to add new data if an insert occurs.

Example field: `dataSource: "todayRegister"`
- c. Try using the **updateMany** operation.
- d. Try using the ``replaceOne`` operation.
6. Insert a document with **incorrect** field names "**neme**" and "**ege**," then rename them to "**name**" and "**age**."
7. Try to reset any document field using the ``$unset`` function.
8. Try update operators like ``$inc``, ``$min``, ``$max``, and ``$mul`` to modify document fields.

Important: Use a *different field for each operation listed below. Insert Data If Not Existing*

Apply the following MongoDB update operators to the specified fields:

- Use **\$max** on the field: **salary**
- Use **\$min** on the field: **overtime**
- Use **\$inc** on the field: **age**
- Use **\$mul** on the fields: **quantity** and **price**

9. Calculate the total revenue for product from **sales** collection documents within the date range '01-01-2020' to '01-01-2023' and then sort them in descending order by total revenue.
 - a. $\text{Total Revenue} = \text{Sum}(\text{Quantity} * \text{Price})$
10. Calculate the average salary for **employees** for each department from the employee's collection.
11. Use likes Collection to calculate max and min likes per title