

14/10/25

## TASK 10 - CRUD operations in Document Databases

**Aim:** To perform MongoDB using npm design on MongoDB designing document database and performing CRUD operations like creating, inserting, querying, finding and removing operations.

### Steps:

Step 1: Install MongoDB using following

Step 2: Install mongosh using the below command.

Step 3: Install mongosh 11.0.0 || download mongosh  
b-s url

to add the mongosh shell binary location.

Step 4: to open mongosh shell as follows  
(: " program files.

Step 5: Type the CRUD (CREATE READ UPDATE  
DELETE) COMMANDS GIVEN IN TEXT FILE

Commands given in the text file.

### CRUD operations:

1. create database

db.createCollection("products")

{ "ok" : 1 }

2. Insert one mobile phone products.

db.mobile phone products.insertOne({

{ name: "Realme", price: 30000, category:

"electronic device", stock: 25, tags:

("bpp")



details: {brand: "realme": warranty: year: 3}

output:-

```
{ "acknowledge": true;
  "insted id: object id ("62a1b3acc")
}
```

3. find one mobile product (lead)

"db-products.find ({name: "realme"})

Output:

```
{ "id": object ("62a1b3acc");
  "name": "realme",
  "price": 30,000;
  "category": "Electronics"
  "stock": 25;
  "tags": ["oppo"]
```

4. insert multiple mobile products.

db.mobile product.insert many ({ {  
name: "Smart phone", price: 30,000, category: "Electronics.  
stock: 50, tags: ["android", "7G"], details

[brand: "realme"]});

{ name: "redmi", price: 30,000, category: "Electronics"  
~~stock = 30, tags~~ ["oppo"] }

Output:

```
{
  "acknowledge" : "true"
  "insert" : {
    "id": "62a1b3acc"
    "id": "62a1b500c"
  }
}
```

5) Display selected field

```
db.mobile product.find(), {name: 1, price: 1,
                             stock: 1})
```

Output:

```
{ "id": object id ("62a1b3acc")
  "name": "realme"; "price": 25000 "stock": 25 }
{ "id": object id ("62a1b500c"): "name": "smart
phone", "price": 25000, "stock": 30 }
{ "id": object id ("62a1b500c"); "name": "redmi"; "price":
25000, "stock": 0 }
```

6) pretty format.

```
db.mobile product.find({}, {name: 1, price: 1,
                             stock: 1}).pretty()
```

Output:

```
{ "id": object id ("62a1b3acc"), "name": "realme
"price": 25000, "stock": 25 }
{ "id": object id ("62a1b500c"), "name": "smart phone";
  price: 25000, "stock": 30 }
```

```
{ "id": object id ("62a1b5a9c"), "name": "realme";
  "price": "35000" "stock": 35 }
```

```
{ "id": object id ("62a1b5d0c"), "name": "realme",
  "price": "25000", "stock": 30 }
```

Delete one mobile products

```
db.mobile product.delete one ({ name: "realme" })
```

Output: { "acknowledge", true "delete count: 1" }

final display

```
db.mobile product.find ({ { name: 1,
  price: 1, stock: 1 } }) . mobile product
```

output:

```
{ "id": object id ("62a1b3a0c")
  "name": "realme"; "price": 30000, "stock": 25 }
```

```
{ "id": object id ("62a1b399c");
  name": "realme", "price": "28000"; "stock": 313. }
```

VELTSCH	
EX No.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE	4
RECORD (5)	
TOTAL (20)	14
SIGN WITH DATE	

Result: Thus; implementation of CRUD<sup>10</sup> operations like creating, inserting, finding, and removing operations Using mongoDB executed successfully.