

# Assignment : B2

## **Title**

Implement MongoDB basic operations

## **Problem Statement:**

Implement database with suitable example using MongoDB and implement all basic operations using two tier architecture.

## **Theory :**

### **1. Insert() Method**

#### **Syntax :**

Basic syntax of insert() command is as follows:

```
db.NAMEOFCOLLECTION.insert(document)
```

### **2. find() Method**

#### **Syntax :**

Basic syntax of find() command is as follows:

```
db.NAMEOFCOLLECTION.find()
```

find() method will display all the documents in a non structured way.

### **3. pretty() Method**

#### **Syntax :**

Basic syntax of pretty() command is as follows:

```
db.mycol.find().pretty()
```

find() method will display all the documents in a structured way.

#### **4. Update() method**

##### **Syntax :**

Basic syntax of update() command is as follows:

```
db.NAMEOFCOLLECTION.update(SELECTIOINCRITERIA, UP-  
DATEDDATA)
```

The update() method updates values in the existing document.

#### **5. remove() method**

##### **Syntax :**

Basic syntax of remove() command is as follows:

```
db.NAMEOFCOLLECTION.remove(DELETIONCRITTERIA))
```

MongoDB's remove() method is used to remove document from the collection.

#### **6. drop() method**

##### **Syntax :**

Basic syntax of drop() command is as follows:

```
db.NAMEOFCOLLECTION.drop()
```

MongoDB's db.collection.drop() is used to drop a collection from the database.

### **1.1 MONITORING COMMANDS**

#### **1.1.1 mongostat**

Captures and returns the counts of database operations by type (e.g. insert, query, update, delete, etc.). These counts report on the load distribution on the server.

How to use :

Execute the following command through root user. #mongostat

#### **1.1.2 mongotop**

Tracks and reports the current read and write activity of a MongoDB instance, and reports these statistics on a

collection basis.

How to use :

Execute the following command  
through root user. #mongostop

note: Observe the change in mongostat and mongotop.

## 1.2 PERFORMANCE COMMANDS

These shows the stat of query performance.  
The following command retrieves the query plan information through the `explain()` method:

```
db.collection.find().explain()
```

## 1.3 SERVER STATUS

The `serverStatus` command returns a document that provides an overview of the database processs state.

How to use :

Execute the following command.  
`db.serverStatus()`

## **Conclusion**

Thus we have successfully implemented all basic operations of MongoDB.