Create or Insert Operation:

Database intro:

```
test> db
test
test> use majharul
switched to db majharul
majharul> show collections
collection
collection2

kon database e achi akhn.

database use or create korte 'use' keyword.

current database e collection list.
```

For creating collections(table) with One document(row):

```
majharul> db.collection3.insertOne({name:"Digital", age: 19, fb:"digital bangladedh"})
{
   acknowledged: true,
   insertedId: ObjectId("6329de3c9554cd3f5a8de524")
}
```

For creating collections(table) with Many document(row):

```
majharul> db.collection5.insertMany([{name:"amirul",married: true, son: 1, daughter:1 },{name:"siddik", married: true, son: 1, daughter: 1},{name:"taher", married: true, son: 2, daughter: 0},{name:"ajadul", married: true, son:2, daughter: 1}]);
{
    acknowledged: true,
    insertedIds: {
        '0': ObjectId("6329e20c9554cd3f5a8de527"),
        '1': ObjectId("6329e20c9554cd3f5a8de528"),
        '2': ObjectId("6329e20c9554cd3f5a8de529"),
        '3': ObjectId("6329e20c9554cd3f5a8de52a")
}
```

To show document(row) in collection(table):

→ [db.collection name.find()]

```
majharul> db.collection5.find()
    _id: ObjectId("6329e20c9554cd3f5a8de527"),
    name: 'amirul',
    married: true,
    daughter: 1
    _id: ObjectId("6329e20c9554cd3f5a8de528"),
    name: 'siddik',
    married: true,
    daughter: 1
    _id: ObjectId("6329e20c9554cd3f5a8de529"),
    name: 'taher',
    married: true,
    daughter: 0
    _id: ObjectId("6329e20c9554cd3f5a8de52a"),
    name: 'ajadul',
    married: true,
majharul>
```

Read or Queries the Documents:

Find by 'name': it will give total documents.



```
majharul> db.collection5.find({name:"ajadul"},{name:1})
[ { _id: ObjectId("6329e20c9554cd3f5a8de52a"), name: 'ajadul' } ]
majharul> db.collection5_find({name:"ajadul"} { id:0, name:1})
```



```
majharul> db.collection5.find({name:"ajadul"},{_id:0,name:1})
[ { name: 'ajadul' } ]
majharul> db.collection5.find({name:"ajadul"} { id:0,name:2})
```

Another Example:

Two way -> using 'limit'/'findOne'

```
majharul> db.collection5.findOne({son: 1})
{
    _id: ObjectId("6329e20c9554cd3f5a8de527"),
    name: 'amirul',
    married: true,
    son: 1,
    daughter: 1
}
```

//It means find and limit er first output ta skip korbe, porer ta show korbe.

Update the Documents:

updateOne:

```
majharul> db.collection5.updateOne({name: "taher"},{$set: {son:3}})
{
   acknowledged: true,
   insertedId: null,
   matchedCount: 1,
   modifiedCount: 1,
   upsertedCount: 0
}
```

```
{
    _id: ObjectId("6329e20c9554cd3f5a8de529"),
    name: 'taher',
    married: true,
    son: 3,
    daughter: 0
},
```

updateMany:

```
majharul> db.collection5.updateMany({son:1},{$set:{daughter: 0}})
{
   acknowledged: true,
   insertedId: null,
   matchedCount: 2,
   modifiedCount: 2,
   upsertedCount: 0
}
```

Delete the Documents:

```
_id: ObjectId("632abb92b8daf74d83e90a46"),
    name: 'null',
    married. null,
    son. null,
    daughter: null
}

majharul> db.collection5.deleteMany({name:"null"})
{ acknowledged: true, deletedCount: 1 }
```

```
//crate collection manually
db.createCollection('collection_name');
//delete collection from command
db.collection_name.drop()
//delete database from command
Db.dropDatabase();
```

More Info:

Documents — MongoDB Manual: https://www.mongodb.com/docs/manual/core/document/

Delete the Documents (mongodb/doc):

<u>findOneAndDelete()</u> provides a sort option. The option allows for the deletion of the first document sorted by the specified order.

<u>db.collection.findAndModify()</u> provides a sort option. The option allows for the deletion of the first document sorted by the specified order.

<u>db.collection.bulkWrite()</u> method provides the ability to perform bulk insert, update, and delete operations.

bulkWrite() supports the following write operations:

- insertOne
- updateOne
- updateMany
- replaceOne
- <u>deleteOne</u>
- deleteMany

```
try {
  db.pizzas.bulkWrite([
    { insertOne: { document: { _id: 3, type: "beef", size: "medium", price: 6 } } },
    \{ insertOne: \{ document: \{ \_id: 4, type: "sausage", size: "large", price: 10 \} \} \},
    { updateOne: {
      filter: { type: "cheese" },
      update: { $set: { price: 8 } }
    }},
    { deleteOne: { filter: { type: "pepperoni"} } },
    { replaceOne: {
      filter: { type: "vegan" },
      replacement: { type: "tofu", size: "small", price: 4 }
   }}
 ])
} catch( error ) {
  print( error )
}
```