

LAB NO 13

SQL to MongoDB Mapping Chart

OBJECTIVE:

- SQL to MongoDB Mapping Chart

LAB TASKS:

1. Create a comparison chart of mongoDB and SQL queries and perform
 - Create and alter queries
 - Insert,update,delete queries on restaurant collection.

SQL Concept	MongoDB Equivalent
CREATE TABLE	Implicit on insertOne() or insertMany()
INSERT INTO	insertOne() / insertMany()
SELECT * FROM table	find()
SELECT col1, col2 FROM table	find({}, {col1: 1, col2: 1})
WHERE clause	Filter object in find()
UPDATE table SET	updateMany() / updateOne()
DELETE FROM table	deleteMany() / deleteOne()
ALTER TABLE ADD	updateMany({}, { \$set: { new_field: value } })
ALTER TABLE DROP COLUMN	updateMany({}, { \$unset: { field_name: "" } })
DROP TABLE	drop()
LIKE	Regex in find() e.g. /pattern/
ORDER BY	.sort({ field: 1/-1 })

A. Create and Alter Queries

B. Insert Data

```
test> db.restaurant.insertOne({
...   name: "Lahori Tikka",
...   cuisine: "Pakistani",
...   location: "Lahore",
...   rating: 4.5,
...   status: "Open"
... })
...
{
  acknowledged: true,
  insertedId: ObjectId('684990ffc2a90de1a850eb67')
}
```

C. Update Queries

```
test> db.restaurant.updateMany(
test> db.restaurant.updateMany({}, { $set: { opening_date: new Date() } })
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
test> db.restaurant.updateMany({}, { $unset: { opening_date: "" } })
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
...
{ $inc: { rating: 0.5 } }
...
}
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

D. Delete Queries

```
test> db.restaurant.deleteMany({ status: "Closed" })
{ acknowledged: true, deletedCount: 0 }
test> db.restaurant.deleteMany({})
{ acknowledged: true, deletedCount: 1 }
```