

Clarusway



## Backend Teamwork -4-

# Teamwork

Subject: ORM & Sequelize

## Teamwork

Subject:

### Learning Goals

- Being able to perform db operation with js codes.

### Introduction

We performed operations on relational databases with SQL. Now let's do a study to perform similar operations via js codes.

### Lets start

Write mongoDB statements corresponding to the SQL statements given below.

1.

```
SELECT *  
FROM people
```

```
db.people.find();
```

2.

```
SELECT id,  
       user_id,  
       status  
FROM people
```

```
db.people.find({}, { user_id: 1, status: 1 });
```

3.

```
SELECT user_id, status  
FROM people
```

```
db.people.find({}, { user_id: 1, status: 1, _id: 0 });
```

4.

```
SELECT *  
FROM people  
WHERE status = "A"
```

```
db.people.find({ status: "A" });
```

5.

```
SELECT user_id, status  
FROM people  
WHERE status = "A"
```

```
db.people.find({ status: "A" }, { user_id: 1, status: 1, _id: 0 });
```

6.

```
SELECT *  
FROM people  
WHERE status != "A"
```

```
db.people.find({ status: { $ne: "A" } });
```

7.

```
SELECT *  
FROM people  
WHERE status = "A"  
AND age = 50
```

```
db.people.find({ status: "A", age: 50 });
```

8.

```
SELECT *  
FROM people  
WHERE status = "A"  
OR age = 50
```

```
db.people.find({ $or: [{ status: "A" }, { age: 50 }] });
```

9.

```
SELECT *  
FROM people  
WHERE age > 25
```

```
db.people.find({ age: { $gt: 25 } });
```

10.

```
SELECT *  
FROM people  
WHERE age < 25
```

```
db.people.find({ age: { $lt: 25 } });
```

11.

```
SELECT *  
FROM people  
WHERE age > 25  
AND age <= 50
```

```
db.people.find({ age: { $gt: 25, $lte: 50 } });
```

12.

```
SELECT *  
FROM people  
WHERE user_id like "%bc%"
```

```
db.people.find({ user_id: /bc/ });  
or;  
db.people.find({ user_id: { $regex: /^bc/ } });
```

13.

```
SELECT *  
FROM people  
WHERE status = "A"  
ORDER BY user_id ASC
```

```
db.people.find({ status: "A" }).sort({ user_id: 1 });
```

14.

```
SELECT *  
FROM people  
WHERE status = "A"  
ORDER BY user_id DESC
```

```
db.people.find({ status: "A" }).sort({ user_id: -1 });
```

15.

```
SELECT COUNT(*)  
FROM people
```

```
db.people.count();  
or;  
db.people.find().count();
```

16.

```
SELECT COUNT(user_id)  
FROM people
```

```
db.people.count({ user_id: { $exists: true } });
```

17.

```
SELECT COUNT(*)  
FROM people  
WHERE age > 30
```

```
db.people.count({ age: { $gt: 30 } });  
or;  
db.people.find({ age: { $gt: 30 } }).count();
```

18.

```
SELECT DISTINCT(status)
FROM people
```

```
b.people.aggregate([{$group: { _id: "$status" } }]);
or;
db.people.distinct("status");
```

19.

```
SELECT *
FROM people
LIMIT 1
```

```
db.people.findOne();
or;
db.people.find().limit(1);
```

20.

```
SELECT *
FROM people
LIMIT 5
SKIP 10
```

```
db.people.find().limit(5).skip(10);
```

21.

```
CREATE TABLE people (
  id MEDIUMINT NOT NULL
    AUTO_INCREMENT,
  user_id Varchar(30),
  age Number,
  status char(1),
  PRIMARY KEY (id)
)
```

```
db.people.insertOne({  
  user_id: "abc123",  
  age: 55,  
  status: "A",  
});
```

22.

```
ALTER TABLE people  
ADD join_date DATETIME
```

```
db.people.updateMany({}, { $set: { join_date: new Date() } });
```

23.

```
DROP TABLE people
```

```
db.people.drop();
```

24.

```
INSERT INTO people(user_id,age,status)  
VALUES ("bcd001",45,"A")
```

```
db.people.insertOne({ user_id: "bcd001", age: 45, status: "A" });
```

25.

```
UPDATE people  
SET status = "C"  
WHERE age > 25
```

```
db.people.updateMany({ age: { $gt: 25 } }, { $set: { status: "C" } });
```

26.

```
UPDATE people
SET age = age + 3
WHERE status = "A"
```

```
db.people.updateMany({ status: "A" }, { $inc: { age: 3 } });
```

27.

```
DELETE FROM people
WHERE status = "D"
```

```
db.people.deleteMany({ status: "D" });
```

28.

```
DELETE FROM people
```

```
db.people.deleteMany({});
```

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😊 Thanks for Attending 🙌

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