24. Consider following structure for MongoDB collections and write a query for following requirements in MongoDB

Teachers(Tname, dno, experience, salary, date\_of joining)

Students(Sname, roll\_no, class)

1. Write a MongoDB query to create above collections & for insertion of some sample documents.
2. Find the information about all teachers of dno = 2 and having salary greater than or equal to 10,000/-
3. Find the student information having roll\_no = 2 or Sname = Anil iv) Display Total no of Students of TE Class

V) update salary as 5% increment of teacher whose experience is >10 years.

// Create Teachers collection and insert sample documents

db.createCollection("Teachers");

db.Teachers.insert([

{

Tname: "John Doe",

dno: 1, experience: 12, salary: 12000, date\_of\_joining: ISODate("2010-01-15")

},

{

Tname: "Jane Smith", dno: 2, experience: 8, salary: 11000, date\_of\_joining: ISODate("2015-03-20")

}

]);

// Create Students collection and insert sample documents

db.createCollection("Students");

db.Students.insert([

{

Sname: "Alice", roll\_no: 1, class: "TE"

},

{

Sname: "Bob", roll\_no: 2, class: "TE"

},

]);

1. **Find the information about all teachers of dno = 2 and having salary greater than or equal to 10,000/-**

db.Teachers.find({ dno: 2, salary: { $gte: 10000 } });

1. **Find the student information having roll\_no = 2 or Sname = Anil**

db.Students.find({ $or: [{ roll\_no: 2 }, { Sname: "Anil" }] });

1. **Display Total no of Students of TE Class**

db.Students.find({ class: "TE" }).count();

1. **Update salary as 5% increment of teachers whose experience is >10 years.**

db.Teachers.update(

{ experience: { $gt: 10 } },

{ $mul: { salary: 1.05 } },

{ multi: true }

);