

MongoDB Basic Queries Study Notes

1. FIND OPERATIONS

- Retrieve all documents:
`db.collection.find()`
- Retrieve with filter:
`db.collection.find({ field: value })`
- Projection (select specific fields):
`db.collection.find(
 { filter },
 { field1: 1, field2: 1, _id: 0 }
)`
- Sorting:
`db.collection.find().sort({ field: 1 })` // Ascending
`db.collection.find().sort({ field: -1 })` // Descending
- Limiting and Skipping:
`db.collection.find().limit(5)` // First 5 documents
`db.collection.find().skip(10)` // Skip first 10 documents
`db.collection.find().sort({ field: 1 }).limit(5).skip(10)`

2. INSERT OPERATIONS

- Insert one document:
`db.collection.insertOne(
 field1: "value1",
 field2: 123,
 field3: ["array", "values"]
)`
- Insert multiple documents:
`db.collection.insertMany([
 { field1: "A", field2: 1 },
 { field1: "B", field2: 2 }
)`

3. UPDATE OPERATIONS

- Update a single document:
`db.collection.updateOne(
 { filterField: value },
 { $set: { fieldToUpdate: newValue } }
)`
- Update multiple documents:
`db.collection.updateMany(
 { filterField: value },
 { $inc: { numericField: 1 } }
)`
- Common update operators:
\$set -> Set the value of a field