MONGODB CRUD

// 📦 CREATE (INSERT)

// Insert one document

```
db.students.insertOne({
  name: "Riya Sharma",
  roll: 101,
  branch: "Computer",
  year: 2
})
```

// Insert multiple documents

```
db.students.insertMany([
  { name: "Amit Verma", roll: 102, branch: "IT", year: 3 },
  { name: "Neha Patel", roll: 103, branch: "EXTC", year: 1 },
  { name: "Kunal Joshi", roll: 104, branch: "Mechanical", year: 4 }
])
```

// 🔍 READ (FIND)

// Find all documents

```
db.students.find()
```

// Find with condition

```
db.students.find({ branch: "Computer" })
```

// Find specific fields only

```
db.students.find({ branch: "Computer" }, { name: 1, roll: 1, _id: 0 })
```

// Find one document

```
db.students.findOne({ roll: 101 })
```

// Comparison operators

```
db.students.find({ year: { $gt: 2 } })   // year > 2
db.students.find({ year: { $lte: 2 } })  // year <= 2
```

// Logical operators

```
db.students.find({ $and: [ { branch: "IT" }, { year: 3 } ] })
db.students.find({ $or: [ { branch: "Computer" }, { year: 1 } ] })
```

// ✏️ UPDATE

// Update one document

```
db.students.updateOne(
  { roll: 101 },
  { $set: { year: 3, branch: "AIML" } }
)
```

// Update many documents
```
db.students.updateMany(
  { branch: "IT" },
  { $set: { branch: "Information Tech" } }
)
```

// Replace one document completely
```
db.students.replaceOne(
  { roll: 104 },
  { name: "Kunal Joshi", roll: 104, branch: "Mech", year: 4 }
)
```

// ❌ DELETE

// Delete one document
```
db.students.deleteOne({ roll: 103 })
```

// Delete many documents
```
db.students.deleteMany({ branch: "Information Tech" })
```

// ⚙️ EXTRA COMMANDS

// Count documents
```
db.students.countDocuments()
```

// Sort results
```
db.students.find().sort({ year: 1 })    // ascending
db.students.find().sort({ year: -1 })   // descending
```

// Limit results
```
db.students.find().limit(2)
```

// Drop collection
```
db.students.drop()
```

// Drop database
```
db.dropDatabase()
```