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