// 1. Create Collection and Insert Documents

db.createCollection("students");

db.students.insertMany([

{ name: "John", age: 20, department: "Computer Science" },

{ name: "Maria", age: 22, department: "Mathematics" },

{ name: "Suresh", age: 21, department: "Physics" }

]);

// 2. Read Documents

// Find all documents in the 'students' collection

db.students.find();

// Find documents with age greater than 20

db.students.find({ age: { $gt: 20 } });

// 3. Update Documents

// Update the department for the student named 'John'

db.students.update({ name: "John" }, { $set: { department: "Electronics" } });

// 4. Using the Save Method

// Save a new document

var newStudent = { name: "Priya", age: 23, department: "Chemistry" };

db.students.save(newStudent);

// Update the document using save()

newStudent.age = 24;

db.students.save(newStudent);

// 5. Delete Documents

// Delete the document for the student named 'Suresh'

db.students.remove({ name: "Suresh" });

// 6. Logical Operators

// Find documents where age is either 20 or 22

db.students.find({ $or: [{ age: 20 }, { age: 22 }] });

// Find documents where age is greater than 20 and the department is 'Physics'

db.students.find({ $and: [{ age: { $gt: 20 } }, { department: "Physics" }] });

// Find documents where age is not equal to 21

db.students.find({ age: { $ne: 21 } });

Explanation:

1. **Create Collection and Insert Documents:**
   * Creates a collection named 'students' and inserts multiple documents into it.
2. **Read Documents:**
   * Retrieves documents from the 'students' collection using **find()**.
   * Filters documents based on age using comparison operators.
3. **Update Documents:**
   * Updates the 'department' field for the student named 'John'.
4. **Using the Save Method:**
   * Demonstrates the use of the **save()** method to insert or update documents.
5. **Delete Documents:**
   * Removes the document for the student named 'Suresh' from the 'students' collection.
6. **Logical Operators:**
   * Uses logical operators like **$or**, **$and**, and **$ne** to filter documents based on specified conditions.