db.createCollection("Student")

// Insert sample data

db.Student.insertMany([

{ studId: 101, studName: "XYZ", studAge: 23, studBranch: "Computer Engineering", studCity: "Pune", subjects: ["Database", "Computer Network"] },

{ studId: 102, studName: "ABC", studAge: 26, studBranch: "Computer", studCity: "Mumbai", subjects: ["Operating Systems", "Database"] },

{ studId: 103, studName: "DEF", studAge: 22, studBranch: "Civil", studCity: "Pune", subjects: ["Structure", "Surveying"] },

{ studId: 104, studName: "GHI", studAge: 28, studBranch: "IT", studCity: "Nashik", subjects: ["AI", "Database"] } ])

db.Student.find({}, { studName: 1, studBranch: 1 })

db.Student.findOne({ studId: 102 })

db.Student.find({}, { studId: 1, studName: 1 }).sort({ studAge: -1 })

db.Student.find({ studAge: { $gt: 25 } }, { studName: 1, studBranch: 1 })

db.Student.find({}, { studId: 1, studName: 1 }).sort({ studAge: -1 })

db.Student.find({ studAge: { $gt: 25 } }, { studName: 1, studBranch: 1 })

db.Student.find().sort({ studAge: 1 }).limit(3)

db.Student.findOne({ studId: 101, studBranch: "Computer" })

db.Student.find({ $or: [{ studBranch: "Computer" }, { studAge: { $lt: 22 } }] })

db.Student.find({ studBranch: { $ne: "Civil" }, studCity: { $ne: "Mumbai" } })

db.Student.find({ studAge: { $lte: 22 } })

db.Student.find({ studBranch: { $in: ["Computer", "Civil", "IT"] } })

db.Student.find({ subjects: "Database" })

db.Student.find({ "subjects.1": "Computer Network" });

db.Student.countDocuments()

db.Student.countDocuments({ studBranch: "Computer Engineering" })

db.Student.updateOne({ studId: 102 }, { $set: { studBranch: "Mechanical Engineering" } })

db.Student.updateMany({studBranch: "Civil"},{$set: {studBranch: "Civil Engineering"}})

db.Student.updateOne({ studId: 104 }, { $set: { studName: "Updated Name", studAge: 30 } })

db.Student.updateMany({}, { $rename: { subjects: "studSub" } })

db.Student.updateOne({ studName: "XYZ" }, { $inc: { studAge: 3 } })

db.Student.updateOne({ studId: 101 }, { $unset: { studAge: "" } })

db.Student.updateMany({}, { $set: { studContact: { personal: 1234, parents: 2345 } } })

db.Student.deleteOne({ studId: 103 })

db.Student.deleteMany({})

db.Student.drop()

db.dropDatabase()