

```
use StudentDB
```

```
db.Students.insertMany([
  { _id: 1, name: "Amit", age: 20, marks: 80, city: "Mumbai" },
  { _id: 2, name: "Riya", age: 22, marks: 92, city: "Delhi" },
  { _id: 3, name: "Raj", age: 21, marks: 76, city: "Mumbai" },
  { _id: 4, name: "Sneha", age: 23, marks: 88, city: "Delhi" },
  { _id: 5, name: "Anil", age: 22, marks: 90, city: "Pune" }
])
```

```
print("All Students:")
printjson(db.Students.find().toArray())
```

```
print("Average Marks by City:")
printjson(
  db.Students.aggregate([
    { $group: { _id: "$city", avgMarks: { $avg: "$marks" } } }
  ]).toArray()
)
```

```
print("Students with Marks > 80 (Sorted):")
printjson(
  db.Students.aggregate([
    { $match: { marks: { $gt: 80 } } },
    { $sort: { marks: -1 } },
    { $project: { _id: 0, name: 1, marks: 1 } }
  ]).toArray()
)
```

```
print("Creating Index on marks field:")
```

```
printjson(db.Students.createIndex({ marks: 1 })))
```

```
print("Indexes Present:")
```

```
printjson(db.Students.getIndexes())
```

```
print("Execution Stats for Query (marks > 85):")
```

```
printjson(db.Students.find({ marks: { $gt: 85 } }).toArray())
```