db.testDb.insertMany([

... { "name": "Alice", "age": 30, "occupation": "Engineer", "salary": 80000 },

... { "name": "Bob", "age": 25, "occupation": "Designer", "salary": 60000 },

... { "name": "Charlie", "age": 28, "occupation": "Teacher", "salary": 50000 },

... { "name": "David", "age": 35, "occupation": "Engineer", "salary": 90000 },

... { "name": "Eve", "age": 40, "occupation": "Designer", "salary": 70000 }

... ])

{

acknowledged: true,

insertedIds: {

'0': ObjectId('670fc4a0bc8dd2a45f86b021'),

'1': ObjectId('670fc4a0bc8dd2a45f86b022'),

'2': ObjectId('670fc4a0bc8dd2a45f86b023'),

'3': ObjectId('670fc4a0bc8dd2a45f86b024'),

'4': ObjectId('670fc4a0bc8dd2a45f86b025')

}

}

Pr9> db.testDb.createIndex({ occupation: 1 })

occupation\_1

Pr9> db.testDb.getIndexes()

[

{ v: 2, key: { \_id: 1 }, name: '\_id\_' },

{ v: 2, key: { occupation: 1 }, name: 'occupation\_1' }

]

Pr9> // Aggregation: Grouping by occupation and calculating average salary

Pr9> db.testDb.aggregate([

... {

... $group: {

... \_id: "$occupation",

... averageSalary: { $avg: "$salary" },

... totalEmployees: { $sum: 1 }

... }

... },

... {

... $sort: { averageSalary: -1 }

... }

... ])

[

{ \_id: 'Engineer', averageSalary: 85000, totalEmployees: 2 },

{ \_id: 'Designer', averageSalary: 65000, totalEmployees: 2 },

{ \_id: 'Teacher', averageSalary: 50000, totalEmployees: 1 }

]

Pr9> db.testDb.aggregate([

... {

... $match: { salary: { $gt: 60000 } }

... },

... {

... $project: {

... \_id: 0,

... name: 1,

... occupation: 1,

... salary: 1

... }

... }

... ])

[

{ name: 'Alice', occupation: 'Engineer', salary: 80000 },

{ name: 'David', occupation: 'Engineer', salary: 90000 },

{ name: 'Eve', occupation: 'Designer', salary: 70000 }