## SLIP 1

Q2)

db.createCollection("Properties")

db.Properties.insertMany([

{

"property\_id": 1,

"owner\_id": 1,

"area": "Nashik",

"rate": 95000

},

{

"property\_id": 2,

"owner\_id": 2,

"area": "Mumbai",

"rate": 105000

},

{

"property\_id": 3,

"owner\_id": 1,

"area": "Pune",

"rate": 85000

},

{

"property\_id": 4,

"owner\_id": 3,

"area": "Nashik",

"rate": 110000

},

{

"property\_id": 5,

"owner\_id": 2,

"area": "Nagpur",

"rate": 98000

}

])

db.createCollection("Owners")

db.Owners.insertMany([

{

"owner\_id": 1,

"name": "Mr. Patil",

"properties\_owned": [1, 3]

},

{

"owner\_id": 2,

"name": "Mrs. Deshmukh",

"properties\_owned": [2, 5]

},

{

"owner\_id": 3,

"name": "Mr. Sharma",

"properties\_owned": [4]

}

])

#A#

db.Properties.aggregate([

{

$group: {

\_id: "$area",

properties: {

$push: {

property\_id: "$property\_id",

rate: "$rate"

}

}

}

}

])

#b#

db.Properties.aggregate([

{

$match: { owner\_id: 1 }

},

{

$sort: { rate: 1 }

},

{

$limit: 1

}

])

#C#

db.Owners.aggregate([

{

$lookup: {

from: "Properties",

localField: "properties\_owned",

foreignField: "property\_id",

as: "properties"

}

},

{

$match: { "properties.area": "Nashik" }

}

])

#D#

db.Properties.find({ rate: { $lt: 100000 } }, { area: 1 })

## SLIP 2

Q2)

db.createCollection(“Newspaper”)

db.Newspaper.insertMany([

[

{

"newspaper\_id": 1,

"name": "The Times of India",

"language": "English",

"publisher\_id": 1,

"city\_id": 1

},

{

"newspaper\_id": 2,

"name": "Loksatta",

"language": "Marathi",

"publisher\_id": 2,

"city\_id": 1

},

{

"newspaper\_id": 3,

"name": "Gujarat Samachar",

"language": "Gujarati",

"publisher\_id": 3,

"city\_id": 2

},

{

"newspaper\_id": 4,

"name": "Pune Times",

"language": "English",

"publisher\_id": 4,

"city\_id": 3

},

{

"newspaper\_id": 5,

"name": "Nashik Tribune",

"language": "Marathi",

"publisher\_id": 5,

"city\_id": 4

}

]

db.createCollection(“Publishers”)

db.Publishers.insertMany([

[

{

"publisher\_id": 1,

"name": "Bennett Coleman & Co. Ltd.",

"state": "Maharashtra"

},

{

"publisher\_id": 2,

"name": "Indian Express Group",

"state": "Maharashtra"

},

{

"publisher\_id": 3,

"name": "Gujarat Samachar Press",

"state": "Gujarat"

},

{

"publisher\_id": 4,

"name": "Pune Publications",

"state": "Maharashtra"

},

{

"publisher\_id": 5,

"name": "Nashik Newspapers",

"state": "Maharashtra"

}

]

db.createCollection(“Cities”)

db.Cities.insertMany([

[

{

"city\_id": 1,

"name": "Mumbai",

"state": "Maharashtra"

},

{

"city\_id": 2,

"name": "Ahmedabad",

"state": "Gujarat"

},

{

"city\_id": 3,

"name": "Pune",

"state": "Maharashtra"

},

{

"city\_id": 4,

"name": "Nashik",

"state": "Maharashtra"

},

{

"city\_id": 5,

"name": "Surat",

"state": "Gujarat"

}

]

#A#

db.Newspapers.aggregate([

{

$lookup: {

from: "Cities",

localField: "city\_id",

foreignField: "city\_id",

as: "city"

}

},

{

$match: { "city.name": "Nashik" }

}

])

#B#

db.Newspapers.find({ language: "Marathi" })

#C#

db.Publishers.count({ state: "Gujarat" })

#D#

var cursor = db.Newspapers.aggregate([

{

$lookup: {

from: "Cities",

localField: "city\_id",

foreignField: "city\_id",

as: "city"

}

},

{

$match: { "city.state": "Maharashtra" }

},

{

$sort: { "newspaper\_id": -1 }

}

])

cursor.forEach(function(doc) {

printjson(doc);

});

## SLIP3

db.createCollection(“Employees”)

db. Employees.insertMany([

[

{

"employee\_id": 1,

"name": "John Doe",

"department\_id": 1,

"salary": 60000

},

{

"employee\_id": 2,

"name": "Jane Smith",

"department\_id": 2,

"salary": 55000

},

{

"employee\_id": 3,

"name": "Michael Johnson",

"department\_id": 1,

"salary": 62000

},

{

"employee\_id": 4,

"name": "Emily Brown",

"department\_id": 2,

"salary": 58000

},

{

"employee\_id": 5,

"name": "David Lee",

"department\_id": 3,

"salary": 63000

}

]

db.createCollection(“Departments”)

db.Departments.insertMany([

[

{

"department\_id": 1,

"name": "Sales"

},

{

"department\_id": 2,

"name": "Marketing"

},

{

"department\_id": 3,

"name": "Finance"

},

{

"department\_id": 4,

"name": "HR"

},

{

"department\_id": 5,

"name": "IT"

}

]

A)db.Employees.find().sort({ salary: -1 }).limit(1).forEach(function(emp) {

print(emp.name);

});

B)db.Employees.aggregate([

{

$group: {

\_id: "$department\_id",

count: { $sum: 1 }

}

},

{

$sort: { count: -1 }

},

{

$lookup: {

from: "Departments",

localField: "\_id",

foreignField: "department\_id",

as: "department"

}

},

{

$limit: 1

},

{

$unwind: "$department"

},

{

$project: {

department\_name: "$department.name",

total\_employees: "$count"

}

}

])

C)var cursor = db.Departments.aggregate([

{

$lookup: {

from: "Employees",

localField: "department\_id",

foreignField: "department\_id",

as: "employees"

}

}

]);

cursor.forEach(function(doc) {

printjson(doc);

});

D)db.Employees.find({ department\_id: 1, salary: { $gt: 50000 } })

## SLIP 4

db.createCollection(“Specializations”)

db.Specializations.insertMany([

[

{

"hospital\_id": 1,

"name": "City Hospital",

"city": "Nashik",

"rating": 4.5

},

{

"hospital\_id": 2,

"name": "ABC Hospital",

"city": "Nashik",

"rating": 4.2

},

{

"hospital\_id": 3,

"name": "XYZ Hospital",

"city": "Mumbai",

"rating": 4.7

},

{

"hospital\_id": 4,

"name": "Sunshine Hospital",

"city": "Nashik",

"rating": 3.9

},

{

"hospital\_id": 5,

"name": "Metro Hospital",

"city": "Nashik",

"rating": 4.1

}

]

db.createCollection(“Reviews”)

db.Reviews.insertMany([

[

{

"specialization\_id": 1,

"name": "Pediatric"

},

{

"specialization\_id": 2,

"name": "Gynaecology"

},

{

"specialization\_id": 3,

"name": "Orthopedic"

}

]

db.createCollection(“Doctors”)

db.Doctors.insertMany([

[

{

"review\_id": 1,

"hospital\_id": 1,

"reviewer\_name": "John",

"review": "Great experience!"

},

{

"review\_id": 2,

"hospital\_id": 1,

"reviewer\_name": "Alice",

"review": "Highly recommended!"

},

{

"review\_id": 3,

"hospital\_id": 2,

"reviewer\_name": "Emma",

"review": "Good service."

}

]

db.createCollection(“Services”)

db.Services.insertMany([

[

{

"doctor\_id": 1,

"name": "Dr. Deshmukh"

},

{

"doctor\_id": 2,

"name": "Dr. Sharma"

},

{

"doctor\_id": 3,

"name": "Dr. Patel"

}

]

db.

[

{

"service\_id": 1,

"doctor\_id": 1,

"hospital\_id": 1

},

{

"service\_id": 2,

"doctor\_id": 1,

"hospital\_id": 2

},

{

"service\_id": 3,

"doctor\_id": 2,

"hospital\_id": 1

},

{

"service\_id": 4,

"doctor\_id": 3,

"hospital\_id": 3

}

]

a) db.Hospitals.aggregate([

{

$lookup: {

from: "Services",

localField: "hospital\_id",

foreignField: "hospital\_id",

as: "services"

}

},

{

$unwind: "$services"

},

{

$lookup: {

from: "Doctors",

localField: "services.doctor\_id",

foreignField: "doctor\_id",

as: "doctors"

}

},

{

$unwind: "$doctors"

},

{

$match: { "doctors.name": "Dr. Sharma" } // Specify the doctor's name for specialization

},

{

$group: {

\_id: "$hospital\_id",

name: { $first: "$name" }

}

}

])

b) db.Hospitals.find({ city: "Nashik" }, { name: 1 })

c) db.Hospitals.aggregate([

{

$lookup: {

from: "Services",

localField: "hospital\_id",

foreignField: "hospital\_id",

as: "services"

}

},

{

$unwind: "$services"

},

{

$lookup: {

from: "Doctors",

localField: "services.doctor\_id",

foreignField: "doctor\_id",

as: "doctors"

}

},

{

$unwind: "$doctors"

},

{

$match: { "doctors.name": "Dr. Deshmukh" }

}

])

d) db.Hospitals.find({ rating: { $gte: 4 } }, { name: 1 })

## SLIP 5

db.createCollection("employees")

db.employees.insertMany([

{ name: "John Doe", project\_id: ObjectId("project\_id1") },

{ name: "Alice Smith", project\_id: ObjectId("project\_id2") },

{ name: "Bob Johnson", project\_id: ObjectId("project\_id1") },

{ name: "Emily Brown", project\_id: ObjectId("project\_id3") },

{ name: "James Wilson", project\_id: ObjectId("project\_id2") }

])

// Create "projects" collection and insert sample documents

db.createCollection("projects")

db.projects.insertMany([

{ name: "Project A", project\_type: "Type1", duration: 4 },

{ name: "Project B", project\_type: "Type2", duration: 2 },

{ name: "Project C", project\_type: "Type1", duration: 5 },

{ name: "Project D", project\_type: "Type3", duration: 6 },

{ name: "Project E", project\_type: "Type2", duration: 3 }

])

a. List all names of projects where Project\_type =….

db.projects.find({ project\_type: "Type1" }, { \_id: 0, name: 1 })

b. db.projects.find({ duration: { $gt: 3 } })

c. db.employees.count({ project\_id: ObjectId("project\_id1") })

d.

db.projects.aggregate([

{ $lookup: { from: "employees", localField: "\_id", foreignField: "project\_id", as: "employees" } },

{ $unwind: "$employees" },

{ $match: { "employees.name": "Mr. Patil" } },

{ $project: { \_id: 0, projectName: "$name" } }

])

## SLIP 6

a.

db.Customers.find({ "policies": "P001" })

b.

db.Policies.aggregate([

... { $group: { \_id: null, averagePremium: { $avg: "$premium\_amount" } } }

... ])

c.

db.Policies.aggregate([

... { $group: { \_id: null, averagePremium: { $avg: "$premium\_amount" } } }

... ])

[ { \_id: null, averagePremium: 3692 } ]

## Slip 7

db.createCollection("Customers")

db.Customers.insertMany([

[

{

"first\_name": "John",

"last\_name": "Doe",

"age": 35,

"email": "john.doe@example.com",

"account\_opening\_date": "2020-01-01",

"branch": "Branch A",

"account\_type": "Savings",

"services": ["Online Banking", "Credit Card"]

},

{

"first\_name": "Sarah",

"last\_name": "Smith",

"age": 28,

"email": "sarah.smith@example.com",

"account\_opening\_date": "2020-01-01",

"branch": "Branch B",

"account\_type": "Checking",

"services": ["Mobile Banking", "Loan"]

},

{

"first\_name": "Michael",

"last\_name": "Johnson",

"age": 40,

"email": "michael.johnson@example.com",

"account\_opening\_date": "2020-01-01",

"branch": "Branch A",

"account\_type": "Savings",

"services": ["Online Banking", "Investment"]

},

{

"first\_name": "Emily",

"last\_name": "Brown",

"age": 32,

"email": "emily.brown@example.com",

"account\_opening\_date": "2020-01-01",

"branch": "Branch C",

"account\_type": "Checking",

"services": ["Credit Card", "Loan"]

},

{

"first\_name": "David",

"last\_name": "Wilson",

"age": 45,

"email": "david.wilson@example.com",

"account\_opening\_date": "2020-01-01",

"branch": "Branch B",

"account\_type": "Savings",

"services": ["Mobile Banking", "Investment"]

}

]

db.createCollection("Transaction")

db.Transaction.insertMany(

[

{

"customer\_id": 1,

"transaction\_type": "Deposit",

"amount": 500,

"timestamp": "2020-01-05T08:00:00Z"

},

{

"customer\_id": 2,

"transaction\_type": "Withdrawal",

"amount": 200,

"timestamp": "2020-01-10T10:30:00Z"

},

{

"customer\_id": 3,

"transaction\_type": "Deposit",

"amount": 1000,

"timestamp": "2020-01-15T12:00:00Z"

},

{

"customer\_id": 4,

"transaction\_type": "Withdrawal",

"amount": 300,

"timestamp": "2020-01-20T15:45:00Z"

},

{

"customer\_id": 5,

"transaction\_type": "Deposit",

"amount": 700,

"timestamp": "2020-01-25T17:30:00Z"

}

]

db.createCollection("BankingServices")

db.BankingServices.insertMany(

[

{

"\_id": 201,

"service\_name": "Savings Account",

"description": "Open a savings account",

"customer\_id": 1,

"service\_date": "2020-01-01",

"branch": "Main Branch"

},

{

"\_id": 202,

"service\_name": "Loan",

"description": "Apply for a loan",

"customer\_id": 2,

"service\_date": "2020-02-15",

"branch": "Town Branch"

},

{

"\_id": 203,

"service\_name": "Credit Card",

"description": "Apply for a credit card",

"customer\_id": 3,

"service\_date": "2020-03-10",

"branch": "Village Branch"

},

{

"\_id": 204,

"service\_name": "Fixed Deposit",

"description": "Start a fixed deposit account",

"customer\_id": 4,

"service\_date": "2020-04-20",

"branch": "Suburb Branch"

},

{

"\_id": 205,

"service\_name": "Checking Account",

"description": "Open a checking account",

"customer\_id": 5,

"service\_date": "2020-05-05",

"branch": "County Branch"

}

]

d.

db.BankingServices.countDocuments({ "branch": "County Branch", "service\_name": "Loan" })

## SLIP 8

db.createCollection(“Items”)

db.Items.insertMany([

[

{

"item\_id": 1,

"name": "Chair",

"quantity": 400,

"height": 10,

"status": "A"

},

{

"item\_id": 2,

"name": "Table",

"quantity": 250,

"height": 12,

"status": "B"

},

{

"item\_id": 3,

"name": "Desk",

"quantity": 500,

"height": 8,

"status": "B"

},

{

"item\_id": 4,

"name": "Shelf",

"quantity": 150,

"height": 6,

"status": "A"

},

{

"item\_id": 5,

"name": "Planner",

"quantity": 100,

"height": 9,

"status": "C"

}

]

db.createCollection(“Categories”)

db.Categories.insertMany([

[

{

"category\_id": 1,

"name": "Furniture"

},

{

"category\_id": 2,

"name": "Office Supplies"

},

{

"category\_id": 3,

"name": "Storage"

}

]

db.createCollection(“Warehouses”)

db.Warehouses.insertMany([

[

{

"warehouse\_id": 1,

"name": "Warehouse A",

"item\_id": 1,

"quantity": 200

},

{

"warehouse\_id": 2,

"name": "Warehouse B",

"item\_id": 2,

"quantity": 300

},

{

"warehouse\_id": 3,

"name": "Warehouse C",

"item\_id": 3,

"quantity": 400

},

{

"warehouse\_id": 4,

"name": "Warehouse D",

"item\_id": 4,

"quantity": 100

},

{

"warehouse\_id": 5,

"name": "Warehouse E",

"item\_id": 5,

"quantity": 50

}

]

1. db.Items.find({ quantity: { $gt: 300 } })
2. db.Items.find({}).count() < 5 // Assuming "tags" refers to the number of categories an item is tagged with
3. db.Items.find({

$or: [

{ status: "B" },

{ $and: [

{ quantity: { $lt: 50 } },

{ height: { $gt: 8 } }

]}

]

})

d)db.Warehouses.aggregate([

{

$lookup: {

from: "Items",

localField: "item\_id",

foreignField: "item\_id",

as: "item"

}

},

{

$unwind: "$item"

},

{

$match: {

"item.name": "Planner",

"quantity": { $lt: 20 }

}

}

])

## SLIP 9

db.createCollection(“Customers”)

db.Customers.insertMany([

[

{

"customer\_id": 1,

"name": "John Doe",

"address": "123 Main St",

"city": "Pimpri"

},

{

"customer\_id": 2,

"name": "Jane Smith",

"address": "456 Elm St",

"city": "Mumbai"

},

{

"customer\_id": 3,

"name": "Michael Johnson",

"address": "789 Oak St",

"city": "Pimpri"

},

{

"customer\_id": 4,

"name": "Emily Brown",

"address": "101 Pine St",

"city": "Pune"

},

{

"customer\_id": 5,

"name": "David Lee",

"address": "321 Cedar St",

"city": "Pimpri"

}

]

db.createCollection(“Loans”)

db.Loans.insertMany([

[

{

"loan\_id": 1,

"customer\_id": 1,

"loan\_type": "Personal",

"loan\_amount": 100000

},

{

"loan\_id": 2,

"customer\_id": 2,

"loan\_type": "Home",

"loan\_amount": 200000

},

{

"loan\_id": 3,

"customer\_id": 3,

"loan\_type": "Car",

"loan\_amount": 150000

},

{

"loan\_id": 4,

"customer\_id": 4,

"loan\_type": "Business",

"loan\_amount": 250000

},

{

"loan\_id": 5,

"customer\_id": 5,

"loan\_type": "Education",

"loan\_amount": 300000

}

]

a)db.Customers.find({ name: /^D/i })

b)db.Customers.aggregate([

{

$match: { city: "Pimpri" }

},

{

$lookup: {

from: "Loans",

localField: "customer\_id",

foreignField: "customer\_id",

as: "loans"

}

},

{

$match: { "loans": { $exists: true, $not: { $size: 0 } } }

},

{

$project: { name: 1 }

},

{

$sort: { name: -1 }

}

])

c)db.Customers.aggregate([

{

$lookup: {

from: "Loans",

localField: "customer\_id",

foreignField: "customer\_id",

as: "loans"

}

},

{

$unwind: "$loans"

},

{

$group: {

\_id: "$customer\_id",

name: { $first: "$name" },

address: { $first: "$address" },

city: { $first: "$city" },

max\_loan\_amount: { $max: "$loans.loan\_amount" }

}

},

{

$sort: { max\_loan\_amount: -1 }

},

{

$limit: 1

}

])

d)db.Customers.updateMany(

{ name: "Mr. Patil", "loans.loan\_amount": { $gt: 100000 } },

{ $set: { address: "New Address" } }

)

## SLIP 10

db.createCollection(“Products”)

db.Products.insertMany([

[

{

"product\_id": 1,

"name": "Smartphone",

"warranty\_period": "1 year"

},

{

"product\_id": 2,

"name": "Laptop",

"warranty\_period": "2 years"

},

{

"product\_id": 3,

"name": "Headphones",

"warranty\_period": "1 year"

},

{

"product\_id": 4,

"name": "Smartwatch",

"warranty\_period": "1 year"

},

{

"product\_id": 5,

"name": "Tablet",

"warranty\_period": "2 years"

}

]

db.createCollection(“Brands”)

db.Brands.insertMany([

[

{

"brand\_id": 1,

"name": "Samsung",

"rating": 4.5

},

{

"brand\_id": 2,

"name": "Apple",

"rating": 4.7

},

{

"brand\_id": 3,

"name": "Sony",

"rating": 4.2

},

{

"brand\_id": 4,

"name": "Dell",

"rating": 4.3

},

{

"brand\_id": 5,

"name": "HP",

"rating": 4.0

}

]

db.createCollection(“Customers”)

db.Customers.insertMany([

[

{

"customer\_id": 1,

"name": "John Doe",

"city": "New York",

"bill\_amount": 60000

},

{

"customer\_id": 2,

"name": "Jane Smith",

"city": "Los Angeles",

"bill\_amount": 70000

},

{

"customer\_id": 3,

"name": "Michael Johnson",

"city": "Chicago",

"bill\_amount": 80000

},

{

"customer\_id": 4,

"name": "Emily Brown",

"city": "Houston",

"bill\_amount": 55000

},

{

"customer\_id": 5,

"name": "David Lee",

"city": "San Francisco",

"bill\_amount": 90000

}

]

db.createCollection(“Purchases”)

db.Purchasess.insertMany([

[

{

"purchase\_id": 1,

"customer\_id": 1,

"product\_id": 1,

"brand\_id": 1,

"purchase\_date": "2023-08-15"

},

{

"purchase\_id": 2,

"customer\_id": 2,

"product\_id": 2,

"brand\_id": 2,

"purchase\_date": "2023-08-15"

},

{

"purchase\_id": 3,

"customer\_id": 3,

"product\_id": 3,

"brand\_id": 3,

"purchase\_date": "2023-08-15"

},

{

"purchase\_id": 4,

"customer\_id": 4,

"product\_id": 4,

"brand\_id": 4,

"purchase\_date": "2023-08-15"

},

{

"purchase\_id": 5,

"customer\_id": 5,

"product\_id": 5,

"brand\_id": 5,

"purchase\_date": "2023-08-15"

}

]

a.db.Products.find({ warranty\_period: "1 year" }, { name: 1 })

b.db.Customers.aggregate([

{

$lookup: {

from: "Purchases",

localField: "customer\_id",

foreignField: "customer\_id",

as: "purchases"

}

},

{

$unwind: "$purchases"

},

{

$match: { "purchases.purchase\_date": "2023-08-15" }

}

])

c.var highestRating = db.Brands.aggregate([

{ $group: { \_id: null, maxRating: { $max: "$rating" } } }

]).toArray()[0].maxRating;

db.Products.aggregate([

{

$lookup: {

from: "Brands",

localField: "brand\_id",

foreignField: "brand\_id",

as: "brand"

}

},

{

$unwind: "$brand"

},

{

$match: { "brand.rating": highestRating }

},

{

$project: { "name": 1, "brand.name": 1 }

}

])

d.db.Customers.find({ city: "New York", bill\_amount: { $gt: 50000 } })

## SLIP 11

db.createCollection(“Products”)

db.Products.insertMany([

[

{

"product\_id": 1,

"name": "Laptop",

"price": 50000,

"quantity": 10

},

{

"product\_id": 2,

"name": "Smartphone",

"price": 30000,

"quantity": 20

},

{

"product\_id": 3,

"name": "Tablet",

"price": 20000,

"quantity": 15

},

{

"product\_id": 4,

"name": "Headphones",

"price": 5000,

"quantity": 30

},

{

"product\_id": 5,

"name": "Smartwatch",

"price": 10000,

"quantity": 25

}

]

db.createCollection(“Customer”)

db.Customer.insertMany([

[

{

"customer\_id": 1,

"name": "John Doe",

"email": "john@example.com",

"address": "123 Main St"

},

{

"customer\_id": 2,

"name": "Jane Smith",

"email": "jane@example.com",

"address": "456 Elm St"

},

{

"customer\_id": 3,

"name": "Michael Johnson",

"email": "michael@example.com",

"address": "789 Oak St"

},

{

"customer\_id": 4,

"name": "Emily Brown",

"email": "emily@example.com",

"address": "101 Pine St"

},

{

"customer\_id": 5,

"name": "David Lee",

"email": "david@example.com",

"address": "321 Cedar St"

}

]

db.createCollection(“Orders”)

db.Orders.insertMany([

[

{

"order\_id": 1,

"customer\_id": 1,

"product\_id": 1,

"quantity": 2,

"order\_value": 100000

},

{

"order\_id": 2,

"customer\_id": 2,

"product\_id": 2,

"quantity": 3,

"order\_value": 90000

},

{

"order\_id": 3,

"customer\_id": 3,

"product\_id": 3,

"quantity": 2,

"order\_value": 40000

},

{

"order\_id": 4,

"customer\_id": 4,

"product\_id": 4,

"quantity": 5,

"order\_value": 25000

},

{

"order\_id": 5,

"customer\_id": 5,

"product\_id": 5,

"quantity": 4,

"order\_value": 40000

}

]

db.createCollection(“Invoices”)

db.Invoices.insertMany([

[

{

"invoice\_id": 1,

"order\_id": 1,

"invoice\_date": "2023-03-15",

"total\_amount": 100000

},

{

"invoice\_id": 2,

"order\_id": 2,

"invoice\_date": "2023-03-16",

"total\_amount": 90000

}

]

a.db.Products.find({})

b.db.Orders.find({ order\_value: { $gt: 20000 } })

c.db.Orders.aggregate([

{

$lookup: {

from: "Invoices",

localField: "order\_id",

foreignField: "order\_id",

as: "invoices"

}

},

{

$match: { invoices: { $eq: [] } }

}

])

d.db.Customers.aggregate([

{

$match: { name: "Mr. Rajiv" }

},

{

$lookup: {

from: "Orders",

localField: "customer\_id",

foreignField: "customer\_id",

as: "orders"

}

},

{

$unwind: "$orders"