λ mongorestore --db zeyad\_inventory ./inv

λ mongosh

λ test> show dbs

λ test> use zeyad\_inventory

λ zeyad\_inventory> show collections

λ zeyad\_inventory> db.orders.find()

λ zeyad\_inventory> db.products.find()

λ zeyad\_inventory> db.users.find()

===================

λ db.products.aggregate([{$group: {\_id: "$category",count: { $sum: 1 }}}])

[

{ \_id: 'TV', count: 2 },

{ \_id: 'Phone', count: 4 },

{ \_id: 'Laptop', count: 3 },

{ \_id: null, count: 2 }

]

===================

λ db.products.aggregate([{$group: {\_id:"$category",max: {$max:'$price'}}}])

[

{ \_id: 'Laptop', max: 44122.476457950004 },

{ \_id: 'TV', max: 11122.1 },

{ \_id: null, max: 244.20000000000002 },

{ \_id: 'Phone', max: 16072.47645795 }

]

===================

λ db.orders.aggregate([{ $match: { userId: ObjectId("6040adb69ad8e02d58cc3e0d") } },{ $lookup: { from: "products", localField: "productsIds", foreignField: "\_id", as: "products" } },{ $unwind: "$products" }, { $project: { \_id: 0, userId: 1, productName: "$products.name", price: "$products.price", category: "$products.category", vendor: "$products.vendor", quantity: "$products.quantity" } } ])

[

{

userId: ObjectId("6040adb69ad8e02d58cc3e0d"),

productName: 'Iphone7',

price: 16072.47645795,

category: 'Phone',

vendor: 'Apple',

quantity: 10

},

{

userId: ObjectId("6040adb69ad8e02d58cc3e0d"),

productName: 'Toshiba Laptop',

price: 11122.1,

category: 'Laptop',

vendor: { name: 'Toshiba', phone: '011111321' },

quantity: 80

},

{

userId: ObjectId("6040adb69ad8e02d58cc3e0d"),

productName: 'Iphone7',

price: 16072.47645795,

category: 'Phone',

vendor: 'Apple',

quantity: 10

}

]

===================

λ const ahmed = db.collection('users').findOne({ name: 'ahmed' });

λ const ahmedId = ahmed.\_id;

λ db.orders.aggregate([

{

$match: {

userId: ahmedId

}

},

{

$unwind: "$productsIds"

},

{

$lookup: {

from: "products",

localField: "productsIds",

foreignField: "\_id",

as: "product"

}

},

{

$unwind: "$product"

},

{

$sort: {

"product.price": -1

}

},

{

$limit: 1

},

{

$project: {

\_id: 0,

productName: "$product.name",

productPrice: "$product.price"}}]);

[ { productName: 'Iphone7', productPrice: 16072.47645795 } ]