Les 10b Mongo practice find 2

MONGO DB "find document" Practice

Microsoft Windows [Version 10.0.18363.1198]

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Go to the "bin" folder and run Mongo Shell

C:\Users\nebojsa.conkic> **cd C:\Program Files\MongoDB\Server\4.4\bin**

C:\Program Files\MongoDB\Server\4.4\bin> **mongo**

MongoDB shell version v4.4.1

connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb

Implicit session: session { "id" : UUID("bdf10b39-460c-4ddb-a7d0-056e42988cf4") }

MongoDB server version: 4.4.1

The server generated these startup warnings when booting:

    2020-11-12T13:45:40.826-05:00: ***** SERVER RESTARTED *****

    2020-11-12T13:45:42.326-05:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

    Enable MongoDB's free cloud-based monitoring service, which will then receive and display

    metrics about your deployment (disk utilization, CPU, operation statistics, etc).

    The monitoring data will be available on a MongoDB website with a unique URL accessible to you

    and anyone you share the URL with. MongoDB may use this information to make product

    improvements and to suggest MongoDB products and deployment options to you.

    To enable free monitoring, run the following command: db.enableFreeMonitoring()

    To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

Let's import file products.json with many Product Documents that will go into DB Inventory

> **mongoimport --db inventory --collection products --file C:\ProgramFiles\MongoDB\Server\4.4\bin\products.json**

uncaught exception: SyntaxError: unexpected token: identifier :

@(shell):1:14

Something went wrong, in that case manually Insert all Documents from products2.json file by using Copy All and Paste with InsertMany syntax.

> **show dbs**

admin   0.000GB

config 0.000GB

local   0.000GB

seneca 0.000GB

> **use inventory**

switched to db inventory

> **db.products.insertMany**([{ "_id" : "ac3", "name" : "AC3 Phone", "brand" : "ACME", "type" : "phone", "price" : 200, "rating" : 3.8,"warranty_years" : 1, "available" : true },

{ "_id" : "ac7", "name" : "AC7 Phone", "brand" : "ACME", "type" : "phone", "price" : 320, "rating" : 4,"warranty_years" : 1, "available" : false },

{ "_id" : "ac3ch", "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "price" : 19, "rating" : 2.8,"warranty_years" : 0.25, "for" : ["ac3", "ac7", "ac9"] },

{ "_id" : "ac3csg", "name" : "AC3 Case Green", "type" : ["accessory", "case"], "color" : "green", "price" : 12, "rating" : 1,"warranty_years" : 0 },

{ "_id" : "pew", "name" : "Phone Extended Warranty", "type" : "warranty", "price" : 38, "rating" : 5,"warranty_years" : 2, "for" : ["ac3", "ac7", "ac9", "qp7", "qp8", "qp9"] },

{ "_id" : "ac3csb", "name" : "AC3 Case Black", "type" : ["accessory", "case"], "color" : "black", "price" : 12.5, "rating" : 2,"warranty_years" : 0.25, "available" : false, "for" : "ac3" },

{ "_id" : "ac3csr", "name" : "AC3 Case Red", "type" : ["accessory", "case"], "color" : "red", "price" : 12, "rating" : 4,"warranty_years" : 0.25, "available" : true, "for" : "ac3" },

{ "_id" : "psbp", "name" : "Phone Service Basic Plan", "type" : "service", "monthly_price" : 40,"rating" : 3, "limits" : { "voice" : { "units" : "minutes", "n" : 400, "over_rate" : 0.05 }, "data" : { "units" : "gigabytes", "n" : 20, "over_rate" : 1 }, "sms" : { "units" : "texts sent", "n" : 100, "over_rate" : 0.001 } }, "term_years" : 2 },

{ "_id" : "pscp", "name" : "Phone Service Core Plan", "type" : "service", "monthly_price" : 60, "rating" : 3, "limits" : { "voice" : { "units" : "minutes", "n" : 1000, "over_rate" : 0.05 }, "data" : { "n" : "unlimited", "over_rate" : 0 }, "sms" : { "n" : "unlimited", "over_rate" : 0 } }, "term_years" : 1 },

{ "_id" : "psfp", "name" : "Phone Service Family Plan", "type" : "service", "monthly_price" : 90,"rating" : 4, "limits" : { "voice" : { "units" : "minutes", "n" : 1200, "over_rate" : 0.05 }, "data" : { "n" : "unlimited", "over_rate" : 0 }, "sms" : { "n" : "unlimited", "over_rate" : 0 } }, "sales_tax" : true, "term_years" : 2 },

{ "_id" : "cbtv", "name" : "Cable TV Basic Service Package", "type" : "tv", "monthly_price" : 50, "rating" : 3.9,"term_years" : 2, "cancel_penalty" : 25, "sales_tax" : true, "additional_tarriffs" : [{ "kind" : "federal tarriff", "amount" : { "percent_of_service" : 0.06 } }, { "kind" : "misc tarriff", "amount" : 2.25 }] }])

```
{
    "acknowledged" : true,
    "insertedIds" : [
        "ac3csr",
        "psbp",
        "pscp",
        "psfp",
        "cbtv"
    ]
}
```

> **db.products.find()**

{ "_id" : "ac3", "name" : "AC3 Phone", "brand" : "ACME", "type" : "phone", "price" : 200, "rating" : 3.8, "warranty_years" : 1, "available" : true }

{ "_id" : "ac7", "name" : "AC7 Phone", "brand" : "ACME", "type" : "phone", "price" : 320, "rating" : 4, "warranty_years" : 1, "available" : false }

{ "_id" : "ac3ch", "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "price" : 19, "rating" : 2.8, "warranty_years" : 0.25, "for" : ["ac3", "ac7", "ac9"] }

{ "_id" : "ac3csg", "name" : "AC3 Case Green", "type" : ["accessory", "case"], "color" : "green", "price" : 12, "rating" : 1, "warranty_years" : 0 }

{ "_id" : "pew", "name" : "Phone Extended Warranty", "type" : "warranty", "price" : 38, "rating" : 5, "warranty_years" : 2, "for" : ["ac3", "ac7", "ac9", "qp7", "qp8", "qp9"] }

{ "_id" : "ac3csb", "name" : "AC3 Case Black", "type" : ["accessory", "case"], "color" : "black", "price" : 12.5, "rating" : 2, "warranty_years" : 0.25, "available" : false, "for" : "ac3" }

{ "_id" : "ac3csr", "name" : "AC3 Case Red", "type" : ["accessory", "case"], "color" : "red", "price" : 12, "rating" : 4, "warranty_years" : 0.25, "available" : true, "for" : "ac3" }

{ "_id" : "psbp", "name" : "Phone Service Basic Plan", "type" : "service", "monthly_price" : 40, "rating" : 3, "limits" : { "voice" : { "units" : "minutes", "n" : 400, "over_rate" : 0.05 }, "data" : { "units" : "gigabytes", "n" : 20, "over_rate" : 1 }, "sms" : { "units" : "texts sent", "n" : 100, "over_rate" : 0.001 } }, "term_years" : 2 }

{ "_id" : "pscp", "name" : "Phone Service Core Plan", "type" : "service", "monthly_price" : 60, "rating" : 3, "limits" : { "voice" : { "units" : "minutes", "n" : 1000, "over_rate" : 0.05 }, "data" : { "n" : "unlimited", "over_rate" : 0 }, "sms" : { "n" : "unlimited", "over_rate" : 0 } }, "term_years" : 1 }

{ "_id" : "psfp", "name" : "Phone Service Family Plan", "type" : "service", "monthly_price" : 90, "rating" : 4, "limits" : { "voice" : { "units" : "minutes", "n" : 1200, "over_rate" : 0.05 }, "data" : { "n" : "unlimited", "over_rate" : 0 }, "sms" : { "n" : "unlimited", "over_rate" : 0 } }, "sales_tax" : true, "term_years" : 2 }

{ "_id" : "cbtv", "name" : "Cable TV Basic Service Package", "type" : "tv", "monthly_price" : 50, "rating" : 3.9, "term_years" : 2, "cancel_penalty" : 25, "sales_tax" : true, "additional_tarriffs" : [{ "kind" : "federal tarriff", "amount" : { "percent_of_service" : 0.06 } }, { "kind" : "misc tarriff", "amount" : 2.25 }] }

Question; Find all documents from the "products" collection and display only key/value pairs for name, type and rating. Do NOT exclude Id key.

> **db.products.find({},{"name":1, "type":1,"rating":1})**

{ "_id" : "ac3", "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8 }

{ "_id" : "ac7", "name" : "AC7 Phone", "type" : "phone", "rating" : 4 }

{ "_id" : "ac3ch", "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "rating" : 2.8 }

{ "_id" : "ac3csg", "name" : "AC3 Case Green", "type" : ["accessory", "case"], "rating" : 1 }

{ "_id" : "pew", "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5 }

{ "_id" : "ac3csb", "name" : "AC3 Case Black", "type" : ["accessory", "case"], "rating" : 2 }

{ "_id" : "ac3csr", "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4 }

{ "_id" : "psbp", "name" : "Phone Service Basic Plan", "type" : "service", "rating" : 3 }

{ "_id" : "pscp", "name" : "Phone Service Core Plan", "type" : "service", "rating" : 3 }

{ "_id" : "psfp", "name" : "Phone Service Family Plan", "type" : "service", "rating" : 4 }

{ "_id" : "cbtv", "name" : "Cable TV Basic Service Package", "type" : "tv", "rating" : 3.9 }

Question; Find all documents from the "products" collection and display only key/value pairs for name, type and rating. Exclude Id key.

> **db.products.find({},{"_id":0,"name":1, "type":1,"rating":1})**

{ "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8 }

{ "name" : "AC7 Phone", "type" : "phone", "rating" : 4 }

{ "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "rating" : 2.8 }

{ "name" : "AC3 Case Green", "type" : ["accessory", "case"], "rating" : 1 }

{ "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5 }

{ "name" : "AC3 Case Black", "type" : ["accessory", "case"], "rating" : 2 }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4 }

{ "name" : "Phone Service Basic Plan", "type" : "service", "rating" : 3 }

{ "name" : "Phone Service Core Plan", "type" : "service", "rating" : 3 }

{ "name" : "Phone Service Family Plan", "type" : "service", "rating" : 4 }

{ "name" : "Cable TV Basic Service Package", "type" : "tv", "rating" : 3.9 }

Question; Find all documents from the "products" collection with Rating of 4 and display only key/value pairs for name, type and rating. Exclude Id key.

> **db.products.find({"rating":4},{"_id":0,"name":1, "type":1,"rating":1})**

{ "name" : "AC7 Phone", "type" : "phone", "rating" : 4 }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4 }

{ "name" : "Phone Service Family Plan", "type" : "service", "rating" : 4 }

Question; Find all documents from the "products" collection with Rating between 3 and 4 and display only key/value pairs for name, type and rating. Exclude Id key.

> **db.products.find({"rating":{"$gte":3,"$lte":4}},{"_id":0,"name":1, "type":1,"rating":1})**

{ "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8 }

{ "name" : "AC7 Phone", "type" : "phone", "rating" : 4 }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4 }

{ "name" : "Phone Service Basic Plan", "type" : "service", "rating" : 3 }

{ "name" : "Phone Service Core Plan", "type" : "service", "rating" : 3 }

{ "name" : "Phone Service Family Plan", "type" : "service", "rating" : 4 }

{ "name" : "Cable TV Basic Service Package", "type" : "tv", "rating" : 3.9 }

Question; Find all documents from the "products" collection with Rating not equal to 4 and display only key/value pairs for name, type and rating. Exclude Id key.

> **db.products.find({"rating":{"$ne":4}},{"_id":0,"name":1, "type":1,"rating":1})**

{ "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8 }

{ "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "rating" : 2.8 }

{ "name" : "AC3 Case Green", "type" : ["accessory", "case"], "rating" : 1 }

{ "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5 }

{ "name" : "AC3 Case Black", "type" : ["accessory", "case"], "rating" : 2 }

{ "name" : "Phone Service Basic Plan", "type" : "service", "rating" : 3 }

{ "name" : "Phone Service Core Plan", "type" : "service", "rating" : 3 }

{ "name" : "Cable TV Basic Service Package", "type" : "tv", "rating" : 3.9 }

Question; Find all documents from the "products" collection that relate either to "ac3" or to "ac7". Display only key/value pairs for name, type, rating and for what is product. Exclude Id key.

> **db.products.find({"for":{"$in":["ac3","ac7"]}},{"_id":0,"name":1, "type":1,"rating":1,"for":1})**

{ "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "rating" : 2.8, "for" : ["ac3", "ac7", "ac9"] }

{ "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5, "for" : ["ac3", "ac7", "ac9", "qp7", "qp8", "qp9"] }

{ "name" : "AC3 Case Black", "type" : ["accessory", "case"], "rating" : 2, "for" : "ac3" }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4, "for" : "ac3" }

Question; Find all documents from the "products" collection that relate to both "ac3" and "ac7". Display only key/value pairs for name, type, rating and for what is product. Exclude Id key.

> **db.products.find({"for":{"$all":["ac3","ac7"]}},{"_id":0,"name":1, "type":1,"rating":1,"for":1})**

{ "name" : "AC3 Series Charger", "type" : ["accessory", "charger"], "rating" : 2.8, "for" : ["ac3", "ac7", "ac9"] }

{ "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5, "for" : ["ac3", "ac7", "ac9", "qp7", "qp8", "qp9"] }

Question; Find all documents from the "products" collection that have key "available". Display only key/value pairs for name, type, rating and available. Exclude Id key.

> **db.products.find({"available":{"$exists":true}},{"_id":0,"name":1, "type":1,"rating":1,"available":1})**

{ "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8, "available" : true }

{ "name" : "AC7 Phone", "type" : "phone", "rating" : 4, "available" : false }

{ "name" : "AC3 Case Black", "type" : ["accessory", "case"], "rating" : 2, "available" : false }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4, "available" : true }

Question; Find all documents from the "products" collection that are either available or have rating at least 4. Display only key/value pairs for name, type, rating and available. Exclude Id key.

> db.products.find({"$or":[{"available": true},{ "rating": {"$gte":4}}]},{"_id":0,"name":1, "type":1,"rating":1,"available":1})

{ "name" : "AC3 Phone", "type" : "phone", "rating" : 3.8, "available" : true }

{ "name" : "AC7 Phone", "type" : "phone", "rating" : 4, "available" : false }

{ "name" : "Phone Extended Warranty", "type" : "warranty", "rating" : 5 }

{ "name" : "AC3 Case Red", "type" : ["accessory", "case"], "rating" : 4, "available" : true }

{ "name" : "Phone Service Family Plan", "type" : "service", "rating" : 4 }