Curso: Programación Backend

Comisión: 18335

Desafío: CRUD en MongoDB

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Tutor: Rahul Kumar

Año: 2022

<u>Consigna</u>: Utilizando Mongo Shell, crear una base de datos llamada ecommerce que contenga dos colecciones: mensajes y productos.

1. Agregar 10 documentos con valores distintos a las colecciones mensajes y productos. El formato de los documentos debe estar en correspondencia con el que venimos utilizando en el entregable con base de datos MariaDB.

```
use ecommerce
witched to db ecommerce
dd.products.find()
    ".id" : ObjectId("6233f5190b01e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 15 }
    ".id" : ObjectId("6233f5119b01e19482f9b53e"), "name" : "memoria crucial 32G8 RG8", "price" : 1000, "stock" : 50 }
    ".id" : ObjectId("6233f519b01e19482f9b53e"), "name" : "Gabinete Sentey 220", "price" : 750, "stock" : 30 }
    ".id" : ObjectId("6233f52b0b01e19482f9b54d"), "name" : "disco ssd 1T8 MO", "price" : 1500, "stock" : 60 }
    ".id" : ObjectId("6233f5349b01e19482f9b54d"), "name" : "disco ssd 1T8 MO", "price" : 1500, "stock" : 80 }
    ".id" : ObjectId("6233f5349b01e19482f9b54d"), "name" : "monitor Samsung 240 TUF Wifi", "price" : 2500, "stock" : 35 }
    ".id" : ObjectId("6233f53f9b01e19482f9b54d"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 25 }
    db.products.insertOne({name: "webcam Logitech 922", price:950, stock:55})

    "acknowledged" : true,
    "insertedId" : ObjectId("6233f6fe4372ce2548040975")

db.products.insertOne({name: "Cooler RG8 socket 1200", price:250, stock:90})

    "acknowledged" : true,
    "insertedId" : ObjectId("6233f71a4372ce2548040976")

db.products.insertOne({name: "Placa Wifi USB Tplink T2U", price:200, stock:80})

    "acknowledged" : true,
    "insertedId" : ObjectId("6233f7834372ce2548040977")
```

```
.chats.insertOne({message:"Hola, ¿cómo estás?"})
      "acknowledged" : true,
"insertedId" : ObjectId("6233f7db4372ce2548040978")
db.chats.insertOne({message:"Muy bien, ¿vos?"})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f7e64372ce2548040979")
db.chats.insertOne({message:"Bien, gracias. Quería hacer una consulta sobre un disco SSD"})
      "acknowledged" : true,
"insertedId" : ObjectId("6233f8014372ce254804097a")
db.chats.insertOne({message:"Sí, decime la consulta"})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f8174372ce254804097b")
db.chats.insertOne({message:"¿Cuál es más rápido? ¿El M2 o el SATA?"})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f82f4372ce254804097c")
db.chats.insertOne({message:"Te recomiendo el disco M2. Tiene una velocidad máxima de 4GB/s contra los 600MB/s del Sata"})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f8864372ce254804097d")
db.chats.insertOne({message:"¡Muy bien! ¿Qué marcas recomiendas?"})
      "acknowledged" : true,
"insertedId" : ObjectId("6233f8964372ce254804097e")
db.chats.insertOne({message:"Claramente, Western Digital"})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f8b04372ce254804097f")
db.chats.insertOne({message:"Perfecto, quiero uno de 1TB"})
      "acknowledged" : true,
"insertedId" : ObjectId("6233f8bc4372ce2548040980")
db.chats.insertOne({message:"Bien. Sale 1500 pesos."})
       "acknowledged" : true,
"insertedId" : ObjectId("6233f8d84372ce2548040981")
```

2. Definir las claves de los documentos en relación con los campos de las tablas de esa base. En el caso de los productos, poner valores al campo precio entre los 100 y 5000 pesos (eligiendo valores intermedios, ej.: 120, 580, 900, 1280, 1700, 2300, 2860, 3350, 4320, 4990).

```
-use ecommerce
witched to db ecommerce
db.products.find()

"id" : ObjectId("6233f519b9b1e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 15 }

"id" : ObjectId("6233f5119b01e19482f9b53e"), "name" : "Gabinete Sentey 220", "price" : 1000, "stock" : 50 }

"id" : ObjectId("6233f519b01e19482f9b53e"), "name" : "Gabinete Sentey 220", "price" : 750, "stock" : 30 }

"id" : ObjectId("6233f52b0b01e19482f9b54d"), "name" : "disco ssd 118 MD", "price" : 1500, "stock" : 60 }

"id" : ObjectId("6233f5349b01e19482f9b54d"), "name" : "disco rigido 118 MD", "price" : 500, "stock" : 80 }

"id" : ObjectId("6233f553b0b1e19482f9b54d"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 2500, "stock" : 35 }

"id" : ObjectId("6233f5519b01e19482f9b54d"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 25 }

db.products.insertOne({name:"webcam Logitech 922",price:950,stock:55}))

"acknowledged" : true,
"insertedId" : ObjectId("6233f6fe4372ce2548040975")

db.products.insertOne({name:"Cooler RGB socket 1200",price:250,stock:90})

"acknowledged" : true,
"insertedId" : ObjectId("6233f71a4372ce2548040976")

db.products.insertOne({name:"Placa Wifi USB Tplink T2U",price:200,stock:80})

"acknowledged" : true,
"insertedId" : ObjectId("6233f7834372ce2548040977")
```

3. Listar todos los documentos en cada colección.

4. Mostrar la cantidad de documentos almacenados en cada una de ellas.

```
db.products.estimatedDocumentCount()

db.products.estimatedDocumentCount()

db.chats.find()

{ ".id" : ObjectId("6233f7db4372ce2548040978"), "message" : "Hola, ¿cómo estás?" }

{ ".id" : ObjectId("6233f7db4372ce2548040978"), "message" : "Muy bien, ¿vos?" }

{ ".id" : ObjectId("6233f7db4372ce2548040979"), "message" : "Sien, gracías. Quería hacer una consulta sobre un disco SSD" }

{ ".id" : ObjectId("6233f8147372ce2548040977"), "message" : "Sien, gracías. Quería hacer una consulta sobre un disco SSD" }

{ ".id" : ObjectId("6233f8147372ce2548040977"), "message" : "Esten, gracías. Quería hacer una consulta sobre un disco SSD" }

{ ".id" : ObjectId("6233f8147372ce2548040977"), "message" : "¿Cuál es más rápido? ¡El NZ o el SATA?" }

{ ".id" : ObjectId("6233f8064372ce2548040977"), "message" : "¡Huy bien! ¿Qué marcas recomiendas?" }

{ ".id" : ObjectId("6233f8064372ce2548040977"), "message" : "Quél es más rápido? ¡El NZ o el SATA?" }

{ ".id" : ObjectId("6233f8064372ce2548040977"), "message" : "Perfecto, quiero uno de 118" }

{ ".id" : ObjectId("6233f8064372ce2548040981"), "message" : "Perfecto, quiero uno de 118" }

{ ".id" : ObjectId("6233f8064372ce2548040981"), "message" : "Perfecto, quiero uno de 118" }

{ ".id" : ObjectId("6233f5090b1e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 15 }

{ ".id" : ObjectId("6233f5190b1e19482f9b53d"), "name" : "mesmoria crucial 3268 RGB", "price" : 1500, "stock" : 50 }

{ ".id" : ObjectId("6233f5190b1e19482f9b53d"), "name" : "disco ssd 118 kD", "price" : 1500, "stock" : 30 }

{ ".id" : ObjectId("6233f53490b1e19482f9b541"), "name" : "disco ssd 118 kD", "price" : 1500, "stock" : 30 }

{ ".id" : ObjectId("6233f53490b1e19482f9b541"), "name" : "disco ssd 118 kD", "price" : 1500, "stock" : 30 }

{ ".id" : ObjectId("6233f53490b1e19482f9b541"), "name" : "disco ssd 118 kD", "price" : 1500, "stock" : 30 }

{ ".id" : ObjectId("6233f53490b1e19482f9b541"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1550, "stock" : 25 }

{ ".id" : ObjectId("6233f51940b19482f9b54
```

- 5. Realizar un CRUD sobre la colección de productos:
- a. Agregar un producto más en la colección de productos

- B. Realizar una consulta por nombre de producto específico:
- i) Listar los productos con precio menor a 1000 pesos.

```
> db.products.find({price:{$1t:1000}})
{ "_id" : ObjectId("6233f51e9b01e19482f9b53f"), "name" : "Gabinete Sentey Z20", "price" : 750, "stock" : 30 }
{ "_id" : ObjectId("6233f5349b01e19482f9b541"), "name" : "disco rigido 1TB WD", "price" : 500, "stock" : 80 }
{ "_id" : ObjectId("6233f6fe4372ce2548040975"), "name" : "webcam Logitech 922", "price" : 950, "stock" : 55 }
{ "_id" : ObjectId("6233f71a4372ce2548040976"), "name" : "Cooler RGB socket 1200", "price" : 250, "stock" : 90 }
{ "_id" : ObjectId("6233f7834372ce2548040977"), "name" : "Placa Wifi USB Tplink T2U", "price" : 200, "stock" : 80 }
{ "_id" : ObjectId("6234aca2cbb7e207d7e6c69d"), "name" : "disco SSD 480GB Kingston", "price" : 650, "stock" : 60 }
```

ii) Listar los productos con precio entre los 1000 a 3000 pesos.

```
> db.products.find({ price : { $gt:1000, $lt:3000}})
{ "_id" : ObjectId("6233f52b9b01e19482f9b540"), "name" : "disco ssd 1TB WD", "price" : 1500, "stock" : 60 }
{ "_id" : ObjectId("6233f53e9b01e19482f9b542"), "name" : "motherboard asus Z490 TUF Wifi", "price" : 2500, "stock" : 35 }
{ "_id" : ObjectId("6233f5519b01e19482f9b543"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 25 }
>
```

iii) Listar los productos con precio mayor a 3000 pesos.

```
> db.products.find({price:{$gt:3000}})
{ "_id" : ObjectId("6233f5009b01e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 15 }
> _
```

iv) Listar los productos con precio mayor a 3000 pesos.

```
db.products.find().sort({price:-1}).limit(1).skip(2)

["_id" : ObjectId("6233f5519b01e19482f9b543"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 25 }

db.products.find()

["_id" : ObjectId("6233f5009b01e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 15 }

["_id" : ObjectId("6233f5119b01e19482f9b53e"), "name" : "memoria crucial 32GB RGB", "price" : 1000, "stock" : 50 }

["_id" : ObjectId("6233f51e9b01e19482f9b53f"), "name" : "Gabinete Sentey Z20", "price" : 750, "stock" : 30 }

["_id" : ObjectId("6233f52b9b01e19482f9b540"), "name" : "disco ssd 1TB WD", "price" : 1500, "stock" : 60 }

["_id" : ObjectId("6233f5349b01e19482f9b541"), "name" : "disco rigido 1TB WD", "price" : 500, "stock" : 80 }

["_id" : ObjectId("6233f53e9b01e19482f9b542"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 2500, "stock" : 35 }

["_id" : ObjectId("6233f519b01e19482f9b542"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 25 }

["_id" : ObjectId("6233f61e4372ce2548040975"), "name" : "webcam Logitech 922", "price" : 950, "stock" : 55 }

["_id" : ObjectId("6233f71a4372ce2548040977"), "name" : "Cooler RGB socket 1200", "price" : 250, "stock" : 80 }

["_id" : ObjectId("6233f73a4372ce2548040977"), "name" : "Placa Wifi USB Tplink T2U", "price" : 200, "stock" : 80 }

["_id" : ObjectId("6234ca2cbb7e207d7e6c69d"), "name" : "disco SSD 480GB Kingston", "price" : 650, "stock" : 60 }
```

c) Hacer una actualización sobre todos los productos, agregando el campo stock a todos ellos con un valor de 100.

```
> db.products.updateMany({},{$set:{stock:100}})
{ "acknowledged" : true, "matchedCount" : 11, "modifiedCount" : 10 }
> db.products.find()
{ "_id" : ObjectId("6233f5009b01e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 100 }
{ "_id" : ObjectId("6233f5119b01e19482f9b53e"), "name" : "memoria crucial 32GB RGB", "price" : 1000, "stock" : 100 }
{ "_id" : ObjectId("6233f51e9b01e19482f9b53f"), "name" : "Gabinete Sentey Z20", "price" : 750, "stock" : 100 }
{ "_id" : ObjectId("6233f51e9b01e19482f9b54d"), "name" : "disco ssd 1TB WD", "price" : 1500, "stock" : 100 }
{ "_id" : ObjectId("6233f5349b01e19482f9b54d"), "name" : "disco rigido 1TB WD", "price" : 500, "stock" : 100 }
{ "_id" : ObjectId("6233f5519b01e19482f9b54d"), "name" : "motherboard asus Z490 TUF Wifi", "price" : 2500, "stock" : 100 }
{ "_id" : ObjectId("6233f5519b01e19482f9b543"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 100 }
{ "_id" : ObjectId("6233f6fe4372ce2548040975"), "name" : "webcam Logitech 922", "price" : 950, "stock" : 100 }
{ "_id" : ObjectId("6233f71a4372ce2548040975"), "name" : "Cooler RGB socket 1200", "price" : 250, "stock" : 100 }
{ "_id" : ObjectId("6233f7834372ce2548040977"), "name" : "Placa Wifi USB Tplink T2U", "price" : 200, "stock" : 100 }
{ "_id" : ObjectId("6234aca2cbb7e207d7e6c69d"), "name" : "disco SSD 480GB Kingston", "price" : 650, "stock" : 100 }
```

d) Cambiar el stock a cero de los productos con precios mayores a 4000 pesos.

```
> db.products.updateMany({price:{$gt:4000}},{$set:{stock:0}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.products.find()
{ "_id" : ObjectId("6233f5009b01e19482f9b53d"), "name" : "micro intel i5", "price" : 4500, "stock" : 0 }
{ "_id" : ObjectId("6233f5119b01e19482f9b53e"), "name" : "memoria crucial 32GB RGB", "price" : 1000, "stock" : 100 }
{ "_id" : ObjectId("6233f51e9b01e19482f9b53f"), "name" : "Gabinete Sentey Z20", "price" : 750, "stock" : 100 }
{ "_id" : ObjectId("6233f52b9b01e19482f9b540"), "name" : "disco ssd 1TB WD", "price" : 1500, "stock" : 100 }
{ "_id" : ObjectId("6233f5349b01e19482f9b541"), "name" : "disco rigido 1TB WD", "price" : 500, "stock" : 100 }
{ "_id" : ObjectId("6233f5349b01e19482f9b542"), "name" : "motherboard asus Z490 TUF Wifi", "price" : 2500, "stock" : 100 }
{ "_id" : ObjectId("6233f5519b01e19482f9b543"), "name" : "monitor Samsung 24 pulgadas curvo", "price" : 1750, "stock" : 100 }
{ "_id" : ObjectId("6233f6fe4372ce2548040975"), "name" : "webcam Logitech 922", "price" : 950, "stock" : 100 }
{ "_id" : ObjectId("6233f71a4372ce2548040976"), "name" : "Cooler RGB socket 1200", "price" : 250, "stock" : 100 }
{ "_id" : ObjectId("6233f7834372ce2548040977"), "name" : "Placa Wifi USB Tplink T2U", "price" : 200, "stock" : 100 }
{ "_id" : ObjectId("6234ca2cbb7e207d7e6c69d"), "name" : "disco SSD 480GB Kingston", "price" : 650, "stock" : 100 }
}
```

## e) Borrar los productos con precio menor a 1000 pesos

```
db.products.find()
( ".id": ObjectId("6233f5009b01e19482f9b53d"), "name": "micro intel i5", "price": 4500, "stock": 0 }
( ".id": ObjectId("6233f5119b01e19482f9b53d"), "name": "memoria crucial 32GB RGB", "price": 1000, "stock": 100 }
( ".id": ObjectId("6233f512e9b01e19482f9b53d"), "name": "Gabinete Sentey Z20", "price": 750, "stock": 100 }
( ".id": ObjectId("6233f512e9b01e19482f9b54d"), "name": "disco ssd 1TB WD", "price": 1500, "stock": 100 }
( ".id": ObjectId("6233f5349b01e19482f9b54d"), "name": "disco rigido 1TB WD", "price": 500, "stock": 100 }
( ".id": ObjectId("6233f53e9b01e19482f9b54d"), "name": "motherboard asus Z490 TUF Wifi", "price": 2500, "stock": 100 }
( ".id": ObjectId("6233f5519b01e19482f9b54d"), "name": "monitor Samsung 24 pulgadas curvo", "price": 1750, "stock": 100 }
( ".id": ObjectId("6233f6fe4372ce2548040975"), "name": "webcam Logitech 922", "price": 950, "stock": 100 }
( ".id": ObjectId("6233f734372ce2548040975"), "name": "Cooler RGB socket 1200", "price": 250, "stock": 100 }
( ".id": ObjectId("6233f7834372ce2548040977"), "name": "Placa Wifi USB Tplink T2U", "price": 250, "stock": 100 }
( ".id": ObjectId("6233f7834372ce2548040977"), "name": "disco SSD 480GB Kingston", "price": 650, "stock": 100 }
( ".id": ObjectId("6233f509b01e19482f9b53d"), "name": "micro intel i5", "price": 4500, "stock": 0 }
( ".id": ObjectId("6233f509b01e19482f9b53d"), "name": "micro intel i5", "price": 4500, "stock": 0 }
( ".id": ObjectId("6233f519b01e19482f9b53d"), "name": "memoria crucial 32GB RGB", "price": 1000, "stock": 100 }
( ".id": ObjectId("6233f53b9b01e19482f9b54d"), "name": "motherboard asus Z490 TUF Wifi", "price": 2500, "stock": 100 }
( ".id": ObjectId("6233f53b9b01e19482f9b542"), "name": "motherboard asus Z490 TUF Wifi", "price": 1500, "stock": 100 }
( ".id": ObjectId("6233f53b9b01e19482f9b542"), "name": "motherboard asus Z490 TUF Wifi", "price": 1500, "stock": 100 }
( ".id": ObjectId("6233f53b9b01e19482f9b542"), "name": "motherboard asus Z490 TUF Wifi", "price": 1750, "stock": 100 }
( ".id": ObjectId
```