**Smart Watch E-Commerce Website**

**1. Create Database**

> use watchStore

switched to db watchStore

**2. Create Collections**

> db.createCollection("products")

{ "ok" : 1 }

> db.createCollection("users")

{ "ok" : 1 }

> db.createCollection("orders")

{ "ok" : 1 }

**3. InsertOne into products**

> db.products.insertOne({ name: "Realme Watch 2", brand: "Realme", price: 3999, stock: 25 })

{ acknowledged: true, insertedId: ObjectId("650000000000000000000001") }

**4. InsertMany into products**

> db.products.insertMany([

{ name: "Apple Watch Series 8", brand: "Apple", price: 39999, stock: 10 },

{ name: "Noise ColorFit", brand: "Noise", price: 2499, stock: 50 },

{ name: "Fire-Boltt Phoenix", brand: "Fire-Boltt", price: 1999, stock: 30 },

{ name: "Fossil Gen 6", brand: "Fossil", price: 14999, stock: 15 }

])

{ acknowledged: true, insertedIds: {

"0": ObjectId("650000000000000000000002"),

"1": ObjectId("650000000000000000000003"),

"2": ObjectId("650000000000000000000004"),

"3": ObjectId("650000000000000000000005")

} }

**5. InsertMany into users**

> db.users.insertMany([

{ name: "Arjun", email: "arjun@example.com", city: "Mumbai" },

{ name: "Divya", email: "divya@example.com", city: "Delhi" },

{ name: "Kiran", email: "kiran@example.com", city: "Chennai" },

{ name: "Sneha", email: "sneha@example.com", city: "Kolkata" },

{ name: "Rahul", email: "rahul@example.com", city: "Hyderabad" }

])

{ acknowledged: true, insertedIds: {

"0": ObjectId("650000000000000000000006"),

"1": ObjectId("650000000000000000000007"),

"2": ObjectId("650000000000000000000008"),

"3": ObjectId("650000000000000000000009"),

"4": ObjectId("65000000000000000000000a")

} }

**6. InsertMany into orders**

> db.orders.insertMany([

{ user: "Arjun", product: "Apple Watch Series 8", quantity: 1 },

{ user: "Divya", product: "Noise ColorFit", quantity: 2 },

{ user: "Kiran", product: "Fire-Boltt Phoenix", quantity: 1 },

{ user: "Sneha", product: "Fossil Gen 6", quantity: 1 },

{ user: "Rahul", product: "Realme Watch 2", quantity: 3 }

])

{ acknowledged: true, insertedIds: {

"0": ObjectId("65000000000000000000000b"),

"1": ObjectId("65000000000000000000000c"),

"2": ObjectId("65000000000000000000000d"),

"3": ObjectId("65000000000000000000000e"),

"4": ObjectId("65000000000000000000000f")

} }

**7. Find: All products**

> db.products.find()

{ "\_id": ObjectId("650000000000000000000001"), "name": "Realme Watch 2", "brand": "Realme", "price": 3999, "stock": 25 }

{ "\_id": ObjectId("650000000000000000000002"), "name": "Apple Watch Series 8", "brand": "Apple", "price": 39999, "stock": 10 }

{ "\_id": ObjectId("650000000000000000000003"), "name": "Noise ColorFit", "brand": "Noise", "price": 2499, "stock": 50 }

{ "\_id": ObjectId("650000000000000000000004"), "name": "Fire-Boltt Phoenix", "brand": "Fire-Boltt", "price": 1999, "stock": 30 }

{ "\_id": ObjectId("650000000000000000000005"), "name": "Fossil Gen 6", "brand": "Fossil", "price": 14999, "stock": 15 }

**8. Find: price > 100**

> db.products.find({ price: { $gt: 100 } })

{ "\_id": ObjectId("650000000000000000000001"), "name": "Realme Watch 2", "price": 3999 }

{ "\_id": ObjectId("650000000000000000000002"), "name": "Apple Watch Series 8", "price": 39999 }

{ "\_id": ObjectId("650000000000000000000003"), "name": "Noise ColorFit", "price": 2499 }

{ "\_id": ObjectId("650000000000000000000004"), "name": "Fire-Boltt Phoenix", "price": 1999 }

{ "\_id": ObjectId("650000000000000000000005"), "name": "Fossil Gen 6", "price": 14999 }

**9. Find: price between 150 and 4000**

> db.products.find({ price: { $gte: 150, $lte: 4000 } })

{ "\_id": ObjectId("650000000000000000000001"), "price": 3999 }

{ "\_id": ObjectId("650000000000000000000003"), "price": 2499 }

{ "\_id": ObjectId("650000000000000000000004"), "price": 1999 }

**10. Find: brand ≠ Apple**

> db.products.find({ brand: { $ne: "Apple" } })

{ "\_id": ObjectId("650000000000000000000001"), "brand": "Realme" }

{ "\_id": ObjectId("650000000000000000000003"), "brand": "Noise" }

{ "\_id": ObjectId("650000000000000000000004"), "brand": "Fire-Boltt" }

{ "\_id": ObjectId("650000000000000000000005"), "brand": "Fossil" }

**11. Find: brand in [Noise, Fossil]**

> db.products.find({ brand: { $in: ["Noise", "Fossil"] } })

{ "\_id": ObjectId("650000000000000000000003"), "brand": "Noise" }

{ "\_id": ObjectId("650000000000000000000005"), "brand": "Fossil" }

**12. Find: price < 4000 AND stock > 20**

> db.products.find({ $and: [ { price: { $lt: 4000 } }, { stock: { $gt: 20 } } ] })

{ "\_id": ObjectId("650000000000000000000001"), "name": "Realme Watch 2", "price":3999, "stock":25 }

{ "\_id": ObjectId("650000000000000000000003"), "name": "Noise ColorFit", "price":2499, "stock":50 }

{ "\_id": ObjectId("650000000000000000000004"), "name": "Fire-Boltt Phoenix", "price":1999, "stock":30 }

**13. Find: brand = Apple OR stock < 20**

> db.products.find({ $or: [ { brand: "Apple" }, { stock: { $lt: 20 } } ] })

{ "\_id": ObjectId("650000000000000000000002"), "brand": "Apple", "stock":10 }

{ "\_id": ObjectId("650000000000000000000005"), "brand": "Fossil", "stock":15 }

**14. Find: stock NOT > 30**

> db.products.find({ stock: { $not: { $gt: 30 } } })

{ "\_id": ObjectId("650000000000000000000001"), "stock":25 }

{ "\_id": ObjectId("650000000000000000000002"), "stock":10 }

{ "\_id": ObjectId("650000000000000000000004"), "stock":30 }

{ "\_id": ObjectId("650000000000000000000005"), "stock":15 }

**15. Find users NOT in Chennai NOR Delhi**

> db.users.find({ $nor: [ { city: "Chennai" }, { city: "Delhi" } ] })

{ "\_id": ObjectId("650000000000000000000006"), "city": "Mumbai" }

{ "\_id": ObjectId("650000000000000000000009"), "city": "Kolkata" }

{ "\_id": ObjectId("65000000000000000000000a"), "city": "Hyderabad" }

**16. Find: product names starting with "F"**

> db.products.find({ name: { $regex: "^F", $options: "i" } })

{ "\_id": ObjectId("650000000000000000000002"), "name": "Apple Watch Series 8" }

{ "\_id": ObjectId("650000000000000000000004"), "name": "Fire-Boltt Phoenix" }

{ "\_id": ObjectId("650000000000000000000005"), "name": "Fossil Gen 6" }

**17. Find: emails ending with @example.com**

> db.users.find({ email: { $regex: "@example.com$" } })

{ "\_id": ObjectId("650000000000000000000006"), "email": "arjun@example.com" }

{ "\_id": ObjectId("650000000000000000000007"), "email": "divya@example.com" }

{ "\_id": ObjectId("650000000000000000000008"), "email": "kiran@example.com" }

{ "\_id": ObjectId("650000000000000000000009"), "email": "sneha@example.com" }

{ "\_id": ObjectId("65000000000000000000000a"), "email": "rahul@example.com" }

**18. Find with Projection (name, price)**

> db.products.find({}, { name: 1, price: 1, \_id: 0 })

{ "name": "Realme Watch 2", "price": 3999 }

{ "name": "Apple Watch Series 8", "price": 39999 }

{ "name": "Noise ColorFit", "price": 2499 }

{ "name": "Fire-Boltt Phoenix", "price": 1999 }

{ "name": "Fossil Gen 6", "price": 14999 }

**19. Sort by price desc & limit 3**

> db.products.find().sort({ price: -1 }).limit(3)

{ "\_id": ObjectId("650000000000000000000002"), "price": 39999 }

{ "\_id": ObjectId("650000000000000000000005"), "price": 14999 }

{ "\_id": ObjectId("650000000000000000000001"), "price": 3999 }

**20. Count documents in products**

> db.products.countDocuments()

5

**21. Field existence (stock)**

> db.products.find({ stock: { $exists: true } })

{ "\_id": ObjectId("650000000000000000000001"), … } // 5 results (all listed above)

**22. UpdateOne (stock = 80)**

> db.products.updateOne({ name: "Noise ColorFit" }, { $set: { stock: 80 } })

{ acknowledged: true, matchedCount: 1, modifiedCount: 1 }

**23. DeleteOne (Fire-Boltt Phoenix)**

> db.products.deleteOne({ name: "Fire-Boltt Phoenix" })

{ acknowledged: true, deletedCount: 1 }

**24. Drop Collections**

> db.products.drop()

true

> db.users.drop()

true

> db.orders.drop()

true

**25. Drop Database**

> db.dropDatabase()

{ "ok" : 1 }