

## **Tugas mongoDB CRUD syntax**

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## Insert a Single Document

### db.collection.insertOne()

```
> use dbinven
switched to db dbinven
> db.dbinven.insertOne(
... { item: "samsung j2", qty: 50, tags: ["white","black"], size: { h: 5.5, w: 20 } } )
2019-04-03T10:39:38.733+0700 E QUERY [thread1] TypeError: db.dbinven.insertOne is not
a function :
@(shell):1:1

> db.dbinven.insertOne( { item: "samsung j2", qty: 50, tags: ["white","black"], size: {
h: 5.5, w: 20 } } )
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5ca42b675a49962cd912d60d")
}
> db.dbinven.find( { item: "samsung j2" } )
{ "_id" : ObjectId("5ca42b675a49962cd912d60d"), "item" : "samsung j2", "qty" : 50, "tags"
: [ "white", "black" ], "size" : { "h" : 5.5, "w" : 20 } }
```

## Insert Multiple Documents

### db.collection.insertMany()

```
> db.dbinven.insertMany([ { item: "samsung a10", qty: 100, tags: ["blue"], size: { h: 6.
5, w: 21 } }, { item: "samsung z10", qty: 85, tags: ["gray"], size: { h: 6.5, w: 19 } },
{ item: "samsung j5", qty: 75, tags: ["white"], size: { h: 6, w: 20 } } ])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("5ca42ff65a49962cd912d60e"),
    ObjectId("5ca42ff65a49962cd912d60f"),
    ObjectId("5ca42ff65a49962cd912d610")
  ]
}
> db.dbinven.find( {} )
{ "_id" : ObjectId("5ca42b675a49962cd912d60d"), "item" : "samsung j2", "qty" : 50, "tags"
: [ "white", "black" ], "size" : { "h" : 5.5, "w" : 20 } }
{ "_id" : ObjectId("5ca42ff65a49962cd912d60e"), "item" : "samsung a10", "qty" : 100, "tag
s" : [ "blue" ], "size" : { "h" : 6.5, "w" : 21 } }
{ "_id" : ObjectId("5ca42ff65a49962cd912d60f"), "item" : "samsung z10", "qty" : 85, "tag
s" : [ "gray" ], "size" : { "h" : 6.5, "w" : 19 } }
{ "_id" : ObjectId("5ca42ff65a49962cd912d610"), "item" : "samsung j5", "qty" : 75, "tags"
: [ "white" ], "size" : { "h" : 6, "w" : 20 } }
```

## Update a Single Document

**db.collection.updateOne()**

```
> db.dbinven.updateOne(
... { item: "samsung j5" },
... {
...   $set: { "size.uom": "in", status: "P" },
...   $currentDate: { lastModified: true }
... }
... )
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

## Update Multiple Documents

**db.collection.updateMany()**

```
> db.dbinven.updateMany(
... { "qty": { $lt: 100 } },
... {
...   $set: { "size.uom": "in", status: "P" },
...   $currentDate: { lastModified: true }
... }
... )
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 3 }
> db.dbinven.find().pretty()
{
  "_id" : ObjectId("5ca42b675a49962cd912d60d"),
  "item" : "samsung j2",
  "qty" : 50,
  "tags" : [
    "white",
    "black"
  ],
  "size" : {
    "h" : 5.5,
    "w" : 20,
    "uom" : "in"
  },
  "status" : "P",
  "lastModified" : ISODate("2019-04-03T04:22:29.476Z")
}
{
  "_id" : ObjectId("5ca42ff65a49962cd912d60e"),
  "item" : "samsung a10",
  "qty" : 100,
  "tags" : [
    "blue"
  ],
  "size" : {
```

## Replace a Document

### db.collection.replaceOne()

```
> db.dbinven.replaceOne(
... { item: "samsung j2" },
... { item: "samsung j2", instock: [ { warehouse: "A", qty: 60 }, { warehouse: "B", qty:
40 } ] }
... )
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.dbinven.find( { item: "samsung j2" } )
{ "_id" : ObjectId("5ca42b675a49962cd912d60d"), "item" : "samsung j2", "instock" : [ { "
warehouse" : "A", "qty" : 60 }, { "warehouse" : "B", "qty" : 40 } ] }
>
```

## Select All Documents in a Collection

In no sql : db.inventory.find( {} )

In mysql : SELECT \* FROM inventory

```
> db.dbinven.find( {} )
{ "_id" : ObjectId("5ca42b675a49962cd912d60d"), "item" : "samsung j2", "instock" : [ { "
warehouse" : "A", "qty" : 60 }, { "warehouse" : "B", "qty" : 40 } ] }
{ "_id" : ObjectId("5ca42ff65a49962cd912d60e"), "item" : "samsung a10", "qty" : 100, "ta
gs" : [ "blue" ], "size" : { "h" : 6.5, "w" : 21 } }
{ "_id" : ObjectId("5ca42ff65a49962cd912d60f"), "item" : "samsung z10", "qty" : 85, "tag
s" : [ "gray" ], "size" : { "h" : 6.5, "w" : 19, "uom" : "in" }, "status" : "P", "lastMo
dified" : ISODate("2019-04-03T04:22:29.477Z") }
{ "_id" : ObjectId("5ca42ff65a49962cd912d610"), "item" : "samsung j5", "qty" : 75, "tags
" : [ "white" ], "size" : { "h" : 6, "w" : 20, "uom" : "in" }, "status" : "P", "lastModi
fied" : ISODate("2019-04-03T04:31:18.132Z") }
>
```

## Specify Equality Condition

in no sql : { <field1>: <value1>, ... }

: db.inventory.find( { status: "P" } )

in mysql : SELECT \* FROM inventory WHERE status = "P"

```
> db.dbinven.find( { status: "P" } )
{ "_id" : ObjectId("5ca42ff65a49962cd912d60f"), "item" : "samsung z10", "qty" : 85, "tag
s" : [ "gray" ], "size" : { "h" : 6.5, "w" : 19, "uom" : "in" }, "status" : "P", "lastMo
dified" : ISODate("2019-04-03T04:22:29.477Z") }
{ "_id" : ObjectId("5ca42ff65a49962cd912d610"), "item" : "samsung j5", "qty" : 75, "tags
" : [ "white" ], "size" : { "h" : 6, "w" : 20, "uom" : "in" }, "status" : "P", "lastModi
fied" : ISODate("2019-04-03T04:31:18.132Z") }
>
```

## Specify AND Conditions

In no sql : `db.inventory.find( { status: "P", qty: { $lt: 85 } } )`

In mysql : `SELECT * FROM inventory WHERE status = "P" AND qty < 85`

```
> db.dbinven.find( { status: "P", qty: { $lt: 85 } } )
{ "_id" : ObjectId("5ca42ff65a49962cd912d610"), "item" : "samsung j5", "qty" : 75, "tags" : [ "white" ], "size" : { "h" : 6, "w" : 20, "uom" : "in" }, "status" : "P", "lastModified" : ISODate("2019-04-03T04:31:18.132Z") }
```

## Match an Embedded/Nested Document

`db.inventory.find( { size: { h: 6.5, w: 19, uom: "in" } } )`

```
> db.dbinven.find( { size: { h: 6.5, w: 19, uom: "in" } } )
{ "_id" : ObjectId("5ca42ff65a49962cd912d60f"), "item" : "samsung z10", "qty" : 85, "tags" : [ "gray" ], "size" : { "h" : 6.5, "w" : 19, "uom" : "in" }, "status" : "P", "lastModified" : ISODate("2019-04-03T04:22:29.477Z") }
```

## Query on Nested Field

- Specify Equality Match on a Nested Field

```
> db.dbinven.find( { "size.uom": "in" } )
{ "_id" : ObjectId("5ca42ff65a49962cd912d60f"), "item" : "samsung z10", "qty" : 85, "tags" : [ "gray" ], "size" : { "h" : 6.5, "w" : 19, "uom" : "in" }, "status" : "P", "lastModified" : ISODate("2019-04-03T04:22:29.477Z") }
{ "_id" : ObjectId("5ca42ff65a49962cd912d610"), "item" : "samsung j5", "qty" : 75, "tags" : [ "white" ], "size" : { "h" : 6, "w" : 20, "uom" : "in" }, "status" : "P", "lastModified" : ISODate("2019-04-03T04:31:18.132Z") }
```