

# Connect MongoDB Shell

Connects to

`mongodb://127.0.0.1:27017` by default

```
mongo
```

Connect to local network

```
mongo "mongodb://192.168.1.1:27017"
```

Connect to MongoDB Atlas

```
mongo "mongodbURI" --username <username>
```

# Database Operation

Show All Databases

```
show dbs
```

Show Current Database

```
db
```

Create / Switch to new Database

```
use jsmasterypro
```

# Database Operation

## Delete Database

```
db.dropDatabase()
```

# Collections

Show all collections of current DB

```
show collections
```

Create new Collection

```
db.createCollection('courses')
```

# Create Documents

Insert one document

```
db.courses.insertOne({  
  name: "Ultimate React",  
  price: 50  
})
```

```
db.courses.insert({  
  name: "Ultimate React",  
  price: 50  
})
```

# Create Documents

Insert multiple document

```
db.courses.insert(  
  {  
    name: "Ultimate React",  
    price: 50  
  },  
  {  
    name: "Complete path to JSM",  
    price: 80  
  }  
)
```

# Read Documents

Find one document

```
db.courses.findOne()
```

Find multiple documents

```
db.courses.find()
```

Find Multiple documents with json

```
db.courses.find().pretty()
```

# Read Documents

Find documents by field value

```
db.courses.find({  
  "name": "Ultimate React"  
})
```

Find By Element in Array

```
db.courses.find({  
  comments: {  
    $elemMatch: {  
      "user": "John"  
    }  
  }  
})
```



# Update Documents

## Update one

```
db.courses.updateOne(  
  { "_id": 1 },  
  { $set:  
    { "name": "Ultimate React.js" }  
  }  
)
```

## Update Multiple

```
db.courses.update(  
  { "price": 50 },  
  { $set: { "price": 49 } }  
)
```

# Update Documents

## Increment Field Value

```
db.courses.update(  
  { "_id": 2 },  
  { $inc: { "views": 109 } }  
)
```

## Rename Field

```
db.courses.updateOne(  
  { _id: 3 },  
  { $rename:  
    { 'views': 'likes' }  
  })
```

# Update Documents

## Update Sub-Documents

```
db.courses.update(  
  { "name": "Ultimate React.js" },  
  { $set: {  
    comments: [  
      {  
        "user": "Michael",  
        "body": "Comment One",  
      },  
      {  
        "user": "Angelia",  
        "body": "Comment Two",  
      }  
    ]  
  }  
})
```

# Delete Documents

Delete a document

```
db.courses.remove(  
  { name: 'Ultimate React.js' }  
)
```

# Count

Returns the count of documents

```
db.courses.find().count()
```

Returns the count of documents that would match a find() query

```
db.courses.find({  
  views: 110  
}).count()
```

# Sorting

Ascending order

```
db.courses.find.sort(  
  { name: 1 }  
)
```

Descending order

```
db.courses.find.sort(  
  { name: -1 }  
)
```

# Results by Pagination

Skip 7 results

```
db.courses.find({}).skip(7)
```

Fetch only 4 results

```
db.courses.find({}).limit(4)
```

# Results by Pagination

Sort by name , Skip first 7 results,  
fetch only next 4 documents

```
db.courses.find({}).sort({  
    "name": 1  
}).skip(7).limit(4)
```



# Add Index

Create Index on single field

```
db.courses.createIndex(  
    { "name": 1 }  
)
```

Create compound Index

```
db.courses.createIndex(  
    { "name": 1, "date": 1 }  
)
```

# Drop Index

## Drop Index

```
db.courses.dropIndex("name_1")
```

# Text Search

Create Text Index on field

```
db.courses.createIndex(  
  {content: "text"}  
)
```

Search by Text

```
db.courses.find(  
  $content: {  
    $search: "JS"  
  }  
)
```

# Find by range query

find courses where views are greater than 70

```
db.courses.find({  
  'views' : { '$gt' : 70 }  
})
```

find courses where views are greater than or equal to 70

```
db.courses.find({  
  'views' : { '$gte' : 70 }  
})
```

# Find by range query

find courses where views are less than 70

```
db.courses.find({  
  'views' : { '$lt' : 70 }  
})
```

find courses where views are less than or equal to 70

```
db.courses.find({  
  'views' : { '$lte' : 70 }  
})
```