# What is MongoDB ?

It’s a no-sql database. It is scalable, open source, high performance, document-oriented database.

# Features:

Scalable, Performance, Develop Faster, High Availability, Scale Bigger, Horizontal scalable.

# DB Installation Steps:

Install Community edition from <https://www.mongodb.com/try/download/community> .

Windows: Install the downloaded setup. After installation, create folder ‘data’ on C: drive and then create folder ‘db’ inside ‘data’. This is where MongoDB will store the data. Without this mongodb would not start.

Add ‘C:\Program Files\MongoDB\Server\7.0\bin’ to the path environment variable.

# DB Commands:

1. show dbs: list all available dbs.
2. use <db\_name>: switch to db or create new db if there is no existing db with the same name.
3. db : shows the name of db in use.
4. db.createCollection(‘<collection\_name>’): create a collection in the db.
5. show collections: lists all collections within the db.
6. db.<collection\_name>.drop(): drop a collection.
7. db.dropDatabase(): will drop current database.
8. db.<collection\_name>.insert({JSON\_OBJ/JSON\_STRING}): create a new object and add the JSON\_OBJ within the collection. NOTE: this method is deprecated. It returns WriteResult object.
9. db.<collection\_name>.find(): lists all records within the collection.
10. db.<collection\_name>.insertOne({JSON\_OBJ/JSON\_STRING }): Another way to create a new single object and add the JSON\_OBJ within the collection. NOTE: It returns document object. We will directly get the insert\_id within the return value.
11. db.<collection\_name>.insertMany([{JSON\_OBJ\_1 }, {JSON\_OBJ\_2 }, {JSON\_OBJ\_3}]): Create a new multiple objects and add the JSON\_OBJ’s within the collection. NOTE: It returns document object. We will directly get the insert\_id’s within the return value.
12. To update value we have 3 methods similar to insert’s.   
    db.<collection\_name>.update(  
    {<filter criteria as JSON\_OBJ\_STRING>},   
    {<updated\_JSON\_OBJ\_STRING>}  
    )
13. db. <collection\_name>.updateOne(  
    {<filter criteria as JSON\_OBJ\_STRING>},  
    {$set:{<updated\_JSON\_OBJ\_STRING>}}  
    )
14. db. <collection\_name>.remove(), db. <collection\_name>.deleteOne() and db. <collection\_name>.deleteMany() methods are used for removing a record within a collection.
15. .pretty(): This is to format the JSON string/object.  
    e.x: db.<collection\_name>.find().pretty()
16. .limit(<num>): this is to limit the number of records.  
    e.x: db.<collection\_name>.find().limit(2)
17. .sort({field\_name: value\_either\_1\_or\_-1}): This method will sort the records in ASC or DESC order. ‘1’ means ASC and ‘-1’ means DESC.  
    e.x: db.<collection\_name>.find().sort({field\_name:1})

# DB References:

Tutorial Vids:

1. MongoDB in one video | Master Mongo Db in one video | MongoDB in one video in Hindi  
   [https://www.youtube.com/watch?v=iri5LLriFHs ]   
   Learn Code with Durgesh
2. Sample

Official Site:

1. Operators:  
   <https://www.mongodb.com/docs/manual/reference/operator/>
2. MongoDB CRUD Operations  
   <https://www.mongodb.com/docs/manual/crud/>