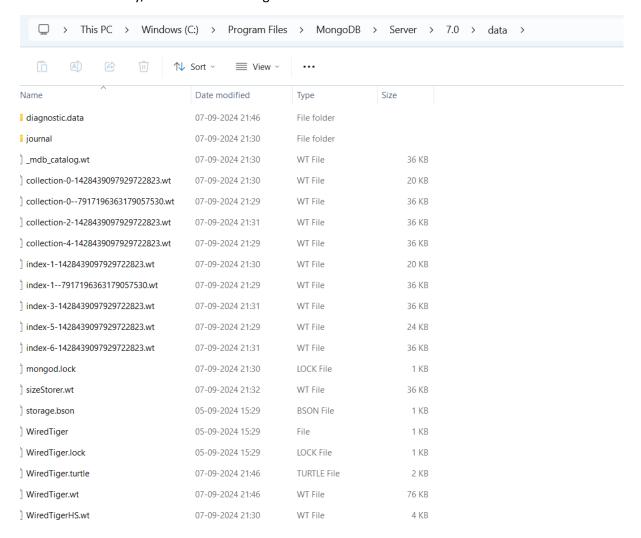## 1. Install MongoDB database server

```
PS C:\Users\Raju Kumar> mongod --version
db version v7.0.14
Build Info: {
    "version": "7.0.14",
    "gitVersion": "ce59cfc6a3c5e5c067dca0d30697edd68d4f5188",
    "modules": [],
    "allocator": "tcmalloc",
    "environment": {
        "distmod": "windows",
        "distarch": "x86_64",
        "target_arch": "x86_64"
    }
}
PS C:\Users\Raju Kumar>
```

2. Create a directory/folder to store MongoDB datafiles

> This PC > Windows (C:) > Program Files > MongoDB > Server > 7.0 > data >

Name	Date modified	Type	Size
diagnostic.data	07-09-2024 21:46	File folder	
journal	07-09-2024 21:30	File folder	
_mdb_catalog.wt	07-09-2024 21:30	WT File	36 KB
collection-0-1428439097929722823.wt	07-09-2024 21:30	WT File	20 KB
collection-0--7917196363179057530.wt	07-09-2024 21:29	WT File	36 KB
collection-2-1428439097929722823.wt	07-09-2024 21:31	WT File	36 KB
collection-4-1428439097929722823.wt	07-09-2024 21:29	WT File	36 KB
index-1-1428439097929722823.wt	07-09-2024 21:30	WT File	20 KB
index-1--7917196363179057530.wt	07-09-2024 21:29	WT File	36 KB
index-3-1428439097929722823.wt	07-09-2024 21:31	WT File	36 KB
index-5-1428439097929722823.wt	07-09-2024 21:29	WT File	24 KB
index-6-1428439097929722823.wt	07-09-2024 21:31	WT File	36 KB
mongod.lock	07-09-2024 21:30	LOCK File	1 KB
sizeStorer.wt	07-09-2024 21:32	WT File	36 KB
storage.bson	05-09-2024 15:29	BSON File	1 KB
WiredTiger	05-09-2024 15:29	File	1 KB
WiredTiger.lock	05-09-2024 15:29	LOCK File	1 KB
WiredTiger.turtle	07-09-2024 21:46	TURTLE File	2 KB
WiredTiger.wt	07-09-2024 21:46	WT File	76 KB
WiredTigerHS.wt	07-09-2024 21:30	WT File	4 KB

3. Set necessary path environment variable

Yes Set

4. Startup MongoDB database

Yes Start

5. Connect to MongoDB database through the MongoDB shell command line interface

Yes Connect

6. View list of available databases

```
test> show dbs
admin    40.00 KiB
cdac     72.00 KiB
config   96.00 KiB
local    72.00 KiB
test> |
```

7. Create a new database named CDAC and connect to it

```
test> use cdac;
switched to db cdac
cdac> |
```

8. View list of available collections in CDAC database

```
cdac> show collections
library
cdac> |
```

9. Create a new collection by the name of LIBRARY

```
cdac> db.createCollection("LIBARARY")
{ ok: 1 }
cdac> |
```

10. Insert the following document in the LIBRARY collection:-

title:'MongoDB programming', author:'Sameer', likes:100

```
cdac> db.libarary.insert({title:'MongoDB Programming', author:'Sameer', likes:100})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId('66dc7f63497154b8c3c73bf8') }
}
cdac> |
```

11. View the recently inserted document and note the _id field

```
cdac> db.libarary.find()
[
  {
    _id: ObjectId('66dc7f63497154b8c3c73bf8'),
```

12. Insert another document in the LIBRARY collection as follows:-

title:'MySQL programming', authors:['Jack','Jill'], likes:200

```
cdac> db.libarary.insert({title:'MySQL Programming', authoers:['Jack', 'Jill'], likes:200})
{
  acknowledged: true,
  insertedIds: { '0': ObjectId('66dc8073497154b8c3c73bf9') }
}
cdac>
```

13. View the inserted documents

```
cdac> db.libarary.find()
[
  {
    _id: ObjectId('66dc7f63497154b8c3c73bf8'),
    title: 'MongoDB Programming',
    author: 'Sameer',
    likes: 100
  },
  {
    _id: ObjectId('66dc8073497154b8c3c73bf9'),
    title: 'MySQL Programming',
    authoers: [ 'Jack', 'Jill' ],
    likes: 200
  }
]
cdac>
```

14. View only the first inserted document

```
cdac> db.libarary.findOne()
{
  _id: ObjectId('66dc7f63497154b8c3c73bf8'),
  title: 'MongoDB Programming',
  author: 'Sameer',
  likes: 100
}
cdac>
```

15. View the documents using the pretty() method

```
cdac> db.libarary.find().pretty()
[
  {
    _id: ObjectId('66dc7f63497154b8c3c73bf8'),
    title: 'MongoDB Programming',
    author: 'Sameer',
    likes: 100
  },
  {
    _id: ObjectId('66dc8073497154b8c3c73bf9'),
    title: 'MySQL Programming',
    authoers: [ 'Jack', 'Jill' ],
    likes: 200
  }
]
cdac>
```

16. Update the document where author name = Sameer and change it to Sameer Dehadrai

```
cdac> db.libarary.update({author:'Sameer'},{$set:{author:'Sameer Dehadrai'}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
cdac>
```

17. Delete all documents that have 100 likes

```
cdac> db.libarary.remove({likes:100})
DeprecationWarning: Collection.remove() is deprecated. Use deleteOne, deleteMany, findOneAndDelete, or bulkWrite.
{ acknowledged: true, deletedCount: 1 }
cdac>
```

18. Drop the LIBRARY collection

```
cdac> db.libarary.drop()
true
cdac>
```

19. Drop the CDAC database

```
cdac> db.dropDatabase()
{ ok: 1, dropped: 'cdac' }
cdac>
```

20. Exit from MongoDB shell

```
cdac> exit
PS C:\Users\Raju Kumar>
```

21. Stop MongoDB server

Yes Stop