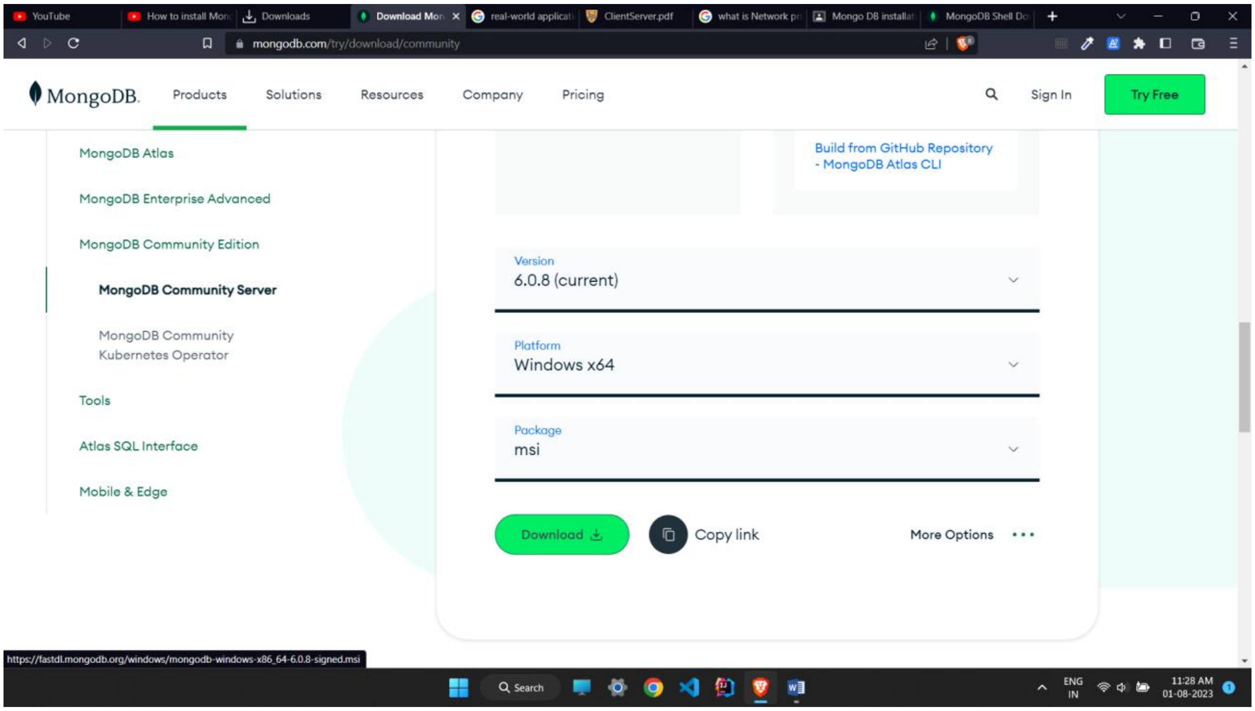
Mongo DB installation process:

Mongo DB server and GUI (Mongo DB compass) installation process:



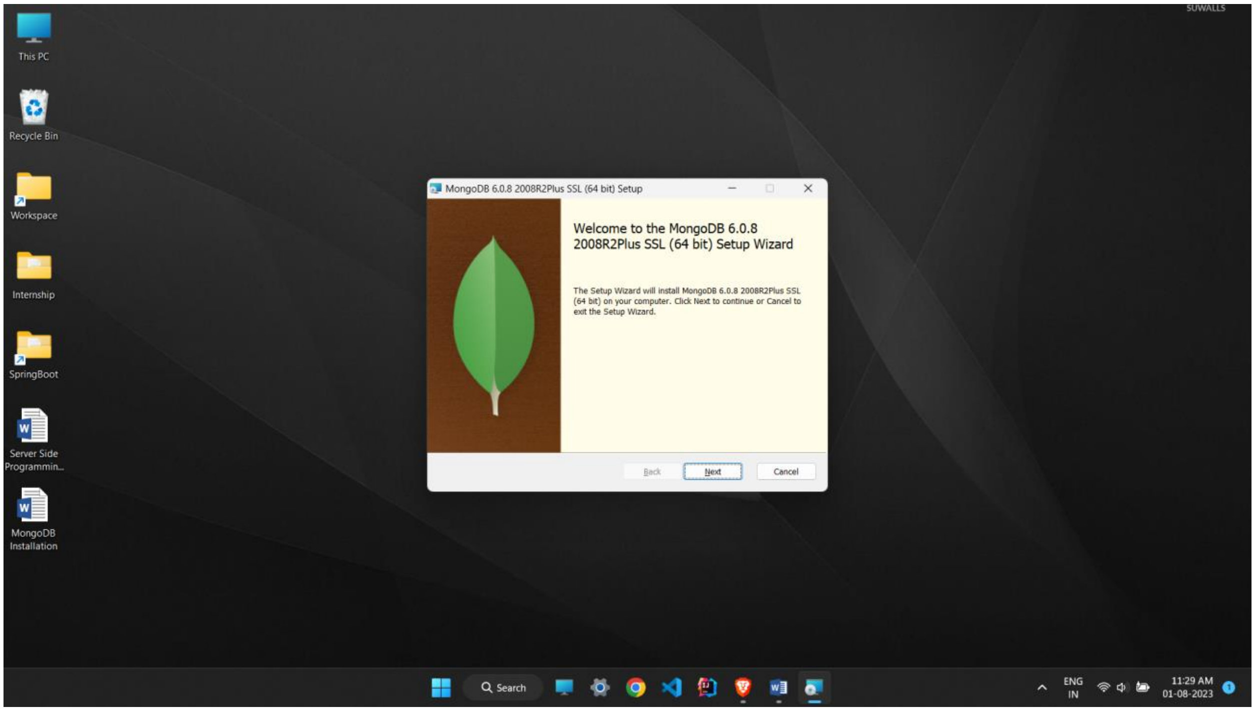
mongodb.com/try/download/community

Version
6.0.8 (current)

Platform
Windows x64

Package
msi

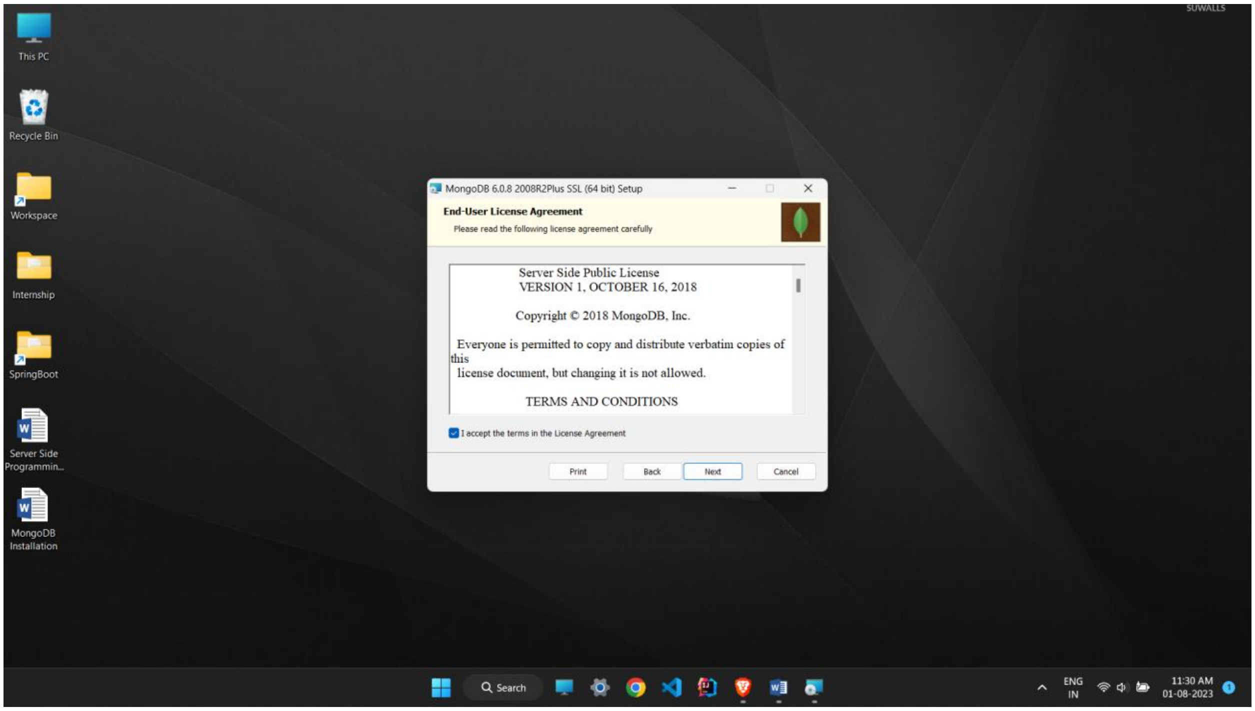
https://fastdl.mongodb.org/windows/mongodb-windows-x86_64-6.0.8-signed.msi



MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Welcome to the MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup Wizard

The Setup Wizard will install MongoDB 6.0.8 2008R2Plus SSL (64 bit) on your computer. Click Next to continue or Cancel to exit the Setup Wizard.



MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

End-User License Agreement

Please read the following license agreement carefully

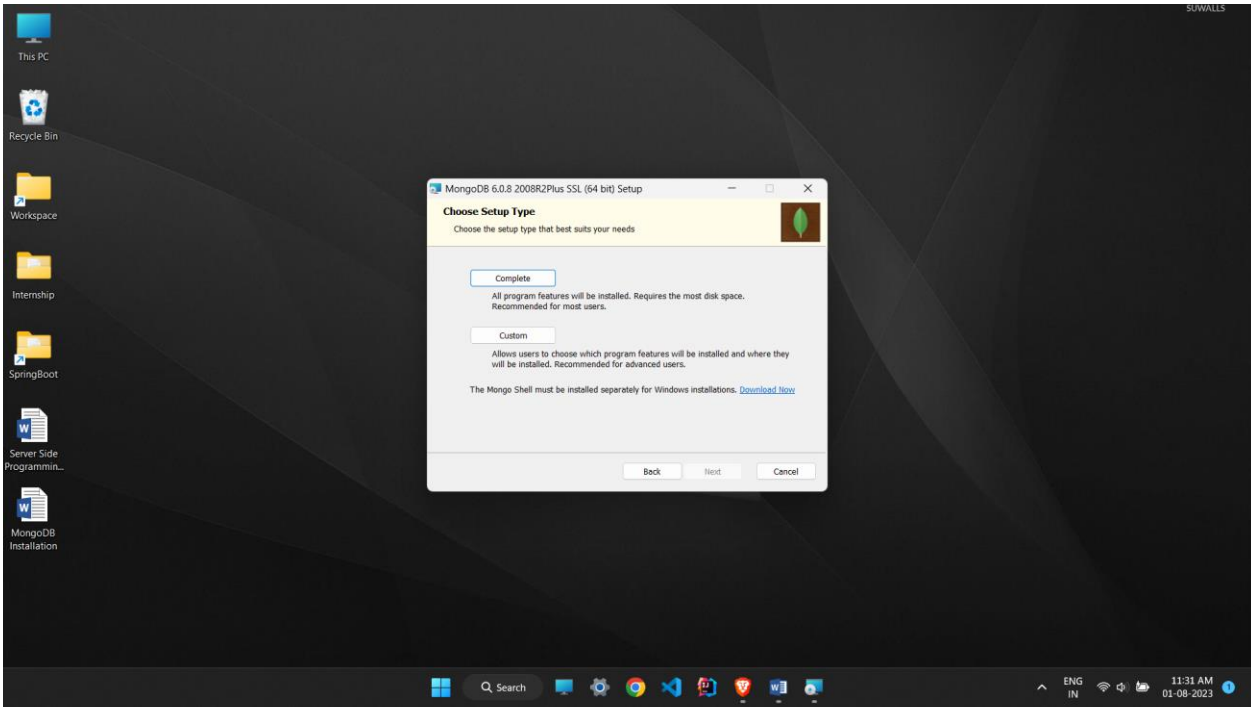
Server Side Public License
VERSION 1, OCTOBER 16, 2018

Copyright © 2018 MongoDB, Inc.

Everyone is permitted to copy and distribute verbatim copies of
this
license document, but changing it is not allowed.

TERMS AND CONDITIONS

☑ I accept the terms in the License Agreement



MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Choose Setup Type

Choose the setup type that best suits your needs

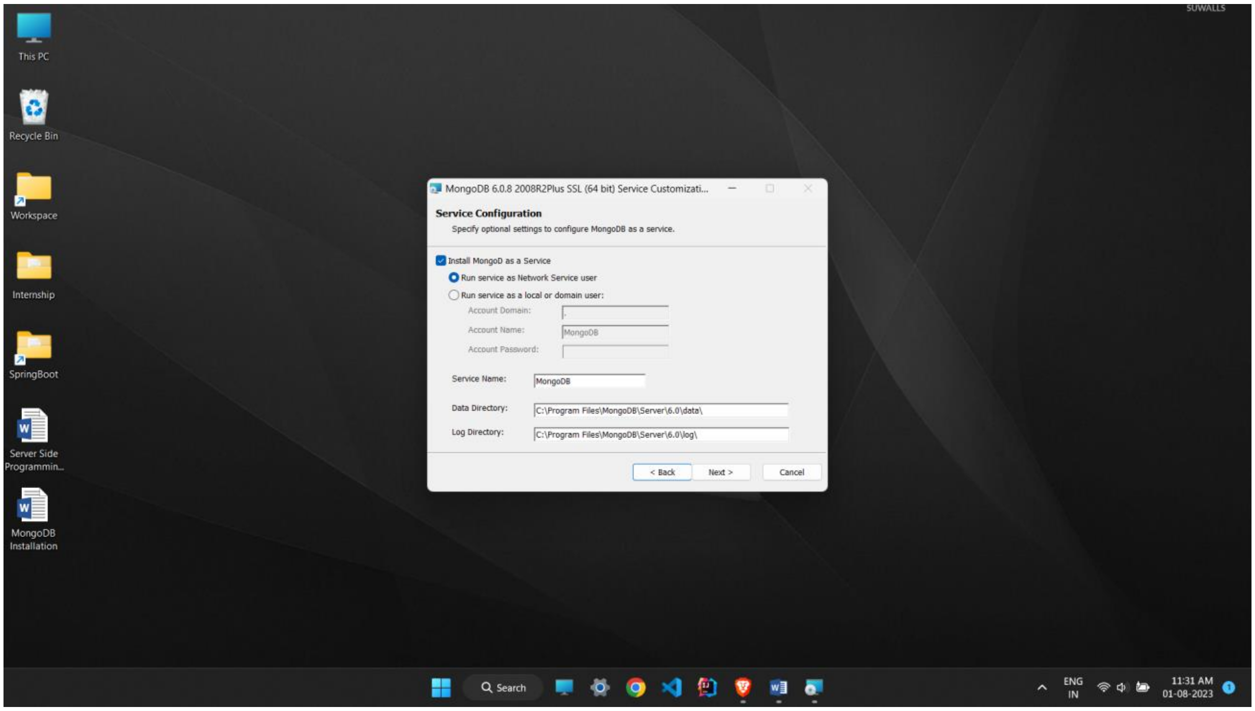
Complete

All program features will be installed. Requires the most disk space. Recommended for most users.

Custom

Allows users to choose which program features will be installed and where they will be installed. Recommended for advanced users.

The Mongo Shell must be installed separately for Windows installations. Download Now



MongoDB 6.0.8 2008R2Plus SSL (64 bit) Service Customizati...

Service Configuration

Specify optional settings to configure MongoDB as a service.

☑ Install MongoD as a Service

● Run service as Network Service user

○ Run service as a local or domain user:

Account Domain: .

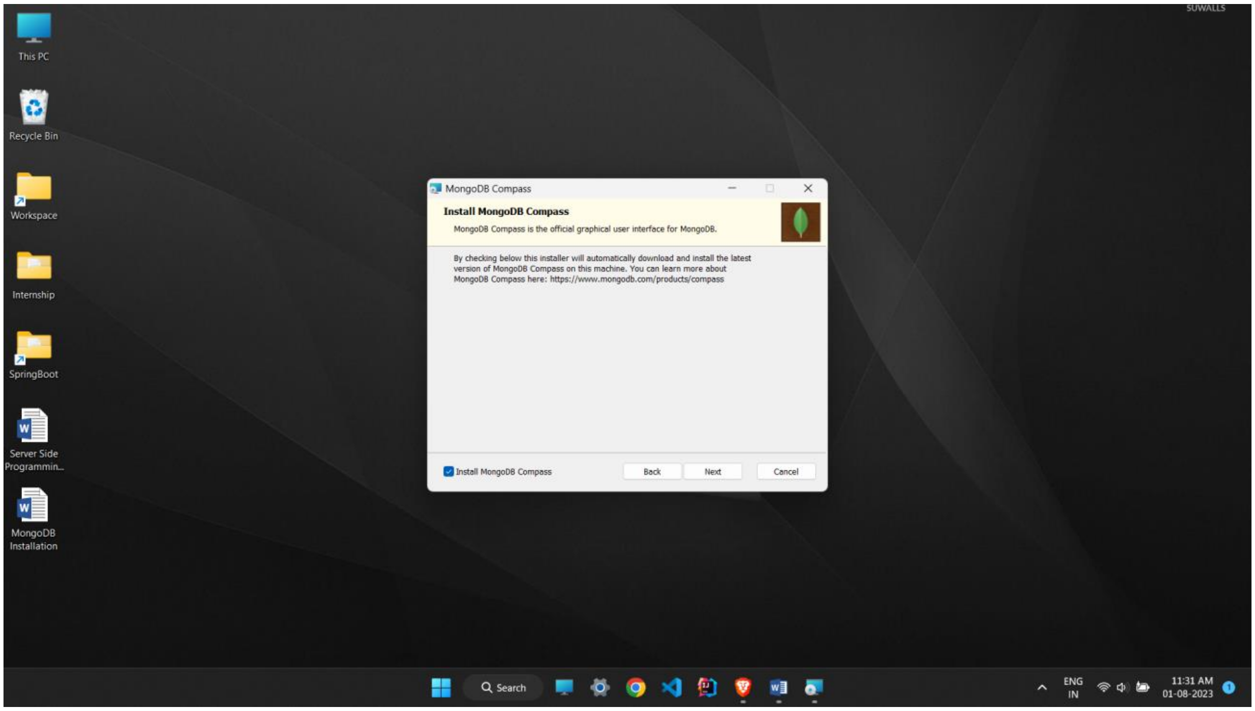
Account Name: MongoDB

Account Password:

Service Name: MongoDB

Data Directory: C:\Program Files\MongoDB\Server\6.0\data\

Log Directory: C:\Program Files\MongoDB\Server\6.0\log\



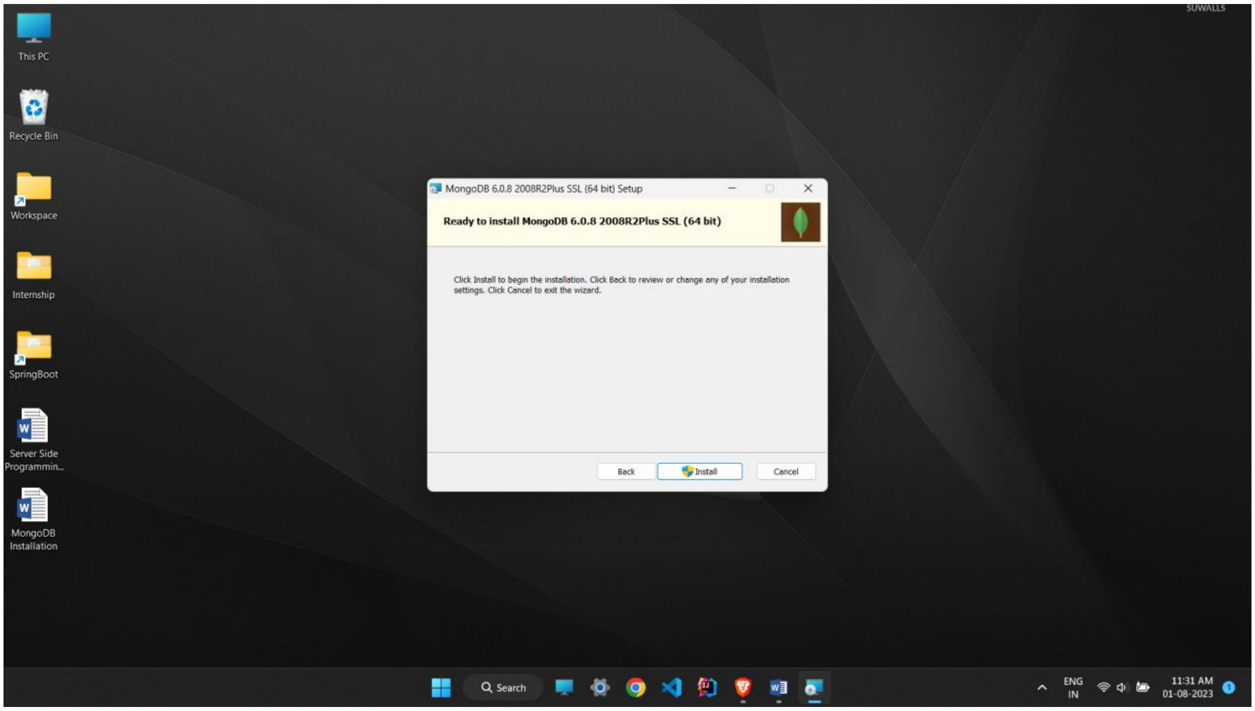
MongoDB Compass

Install MongoDB Compass

MongoDB Compass is the official graphical user interface for MongoDB.

By checking below this installer will automatically download and install the latest version of MongoDB Compass on this machine. You can learn more about MongoDB Compass here: https://www.mongodb.com/products/compass

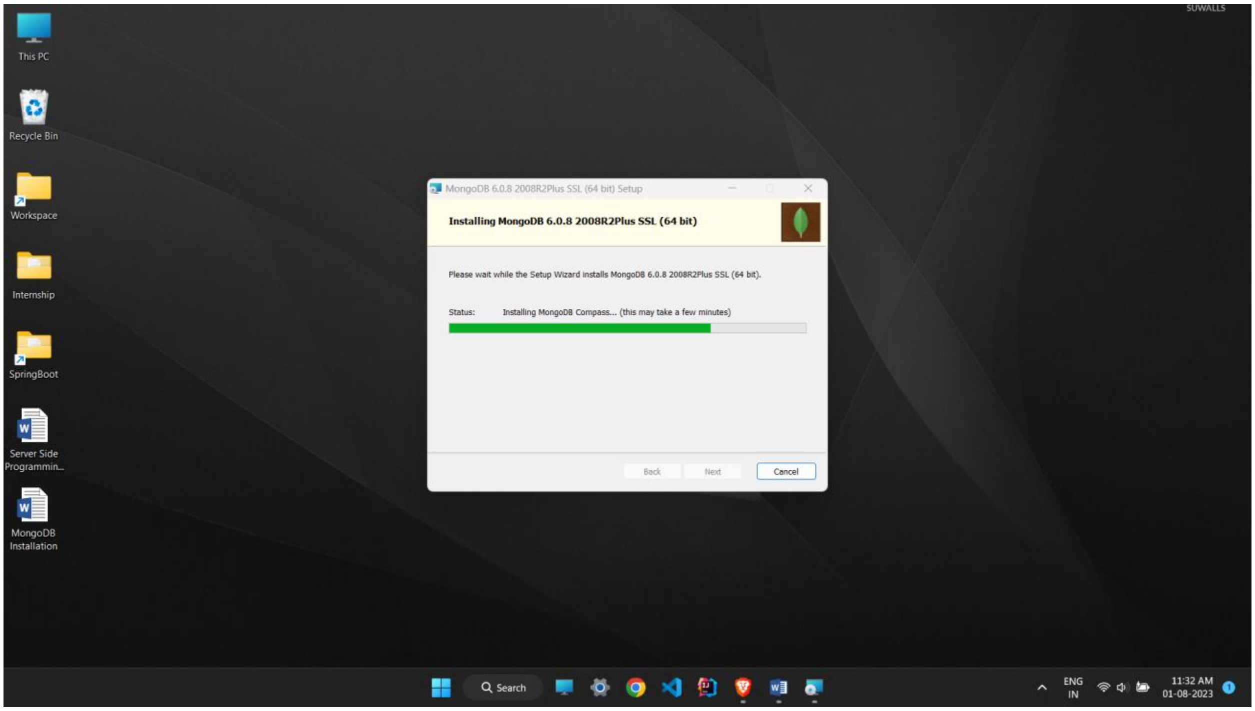
☑ Install MongoDB Compass



MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Ready to install MongoDB 6.0.8 2008R2Plus SSL (64 bit)

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.

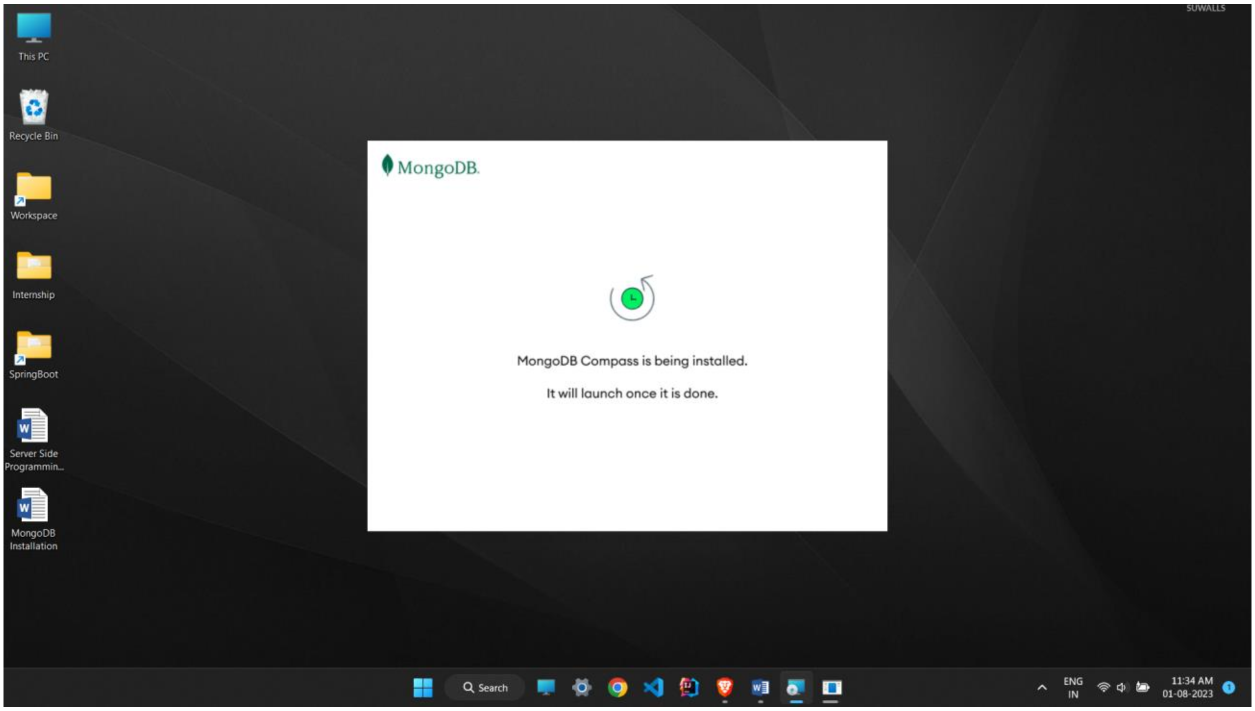


MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Installing MongoDB 6.0.8 2008R2Plus SSL (64 bit)

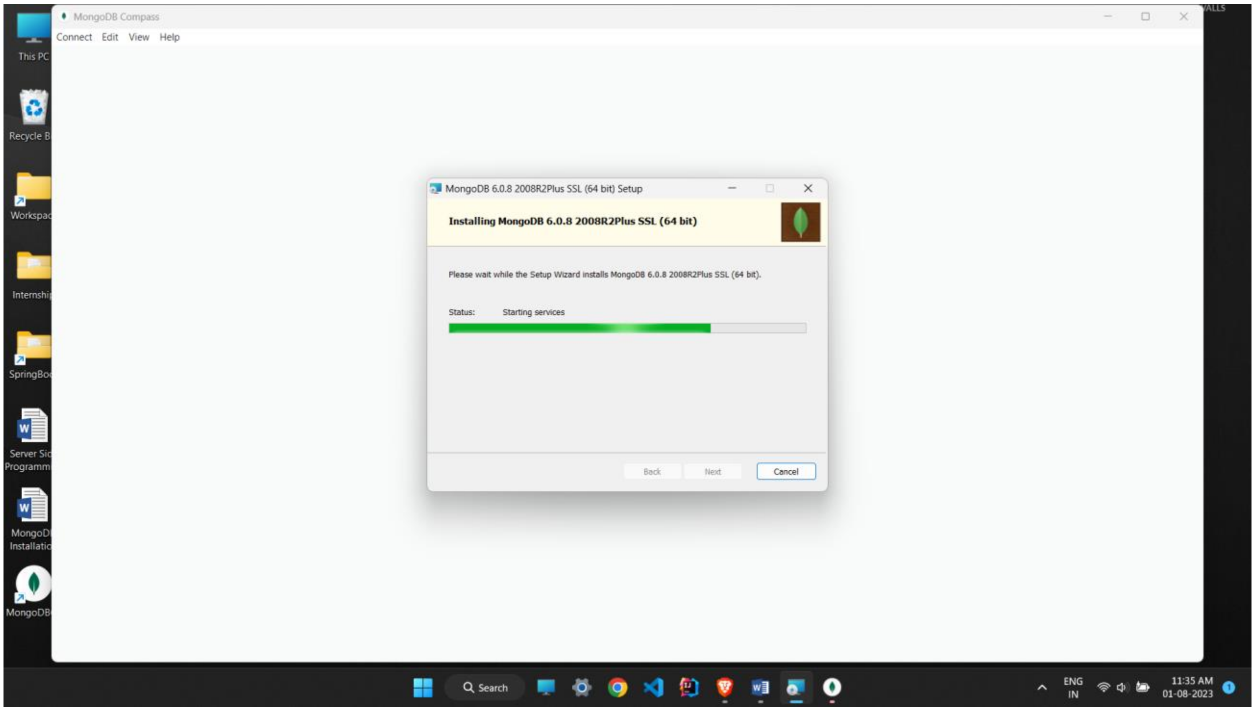
Please wait while the Setup Wizard installs MongoDB 6.0.8 2008R2Plus SSL (64 bit).

Status: Installing MongoDB Compass... (this may take a few minutes)



MongoDB Compass is being installed.

It will launch once it is done.

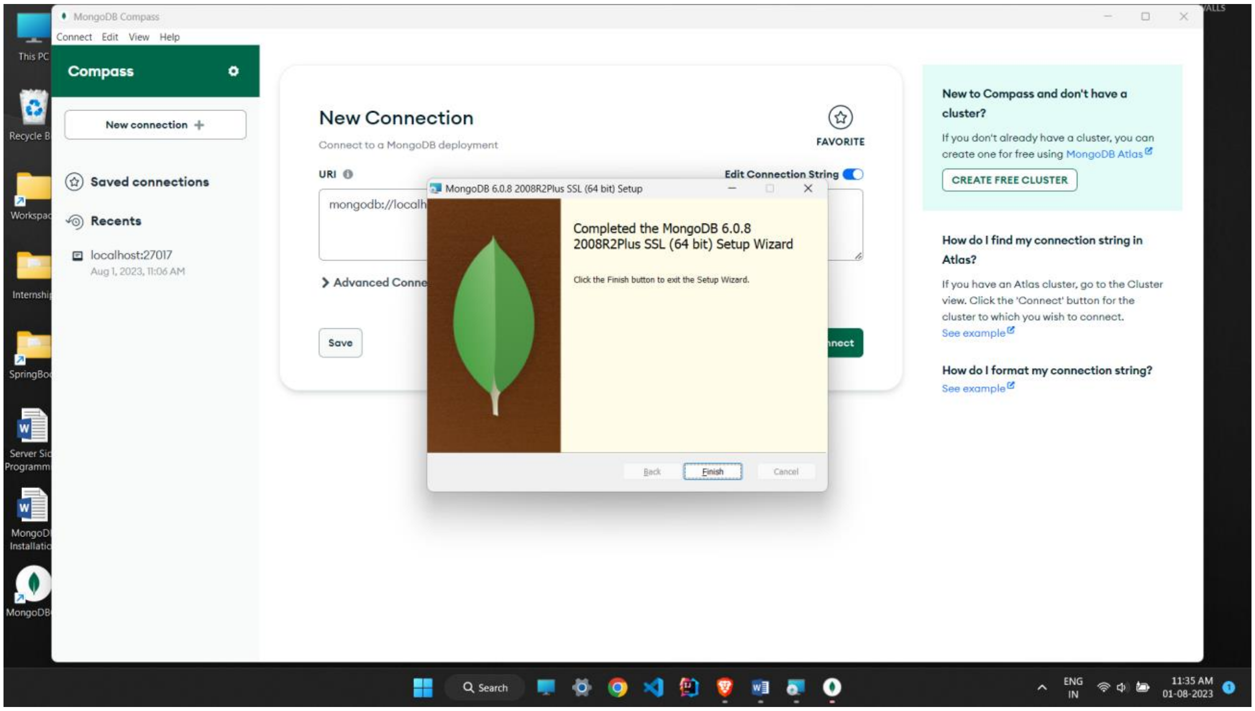


MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Installing MongoDB 6.0.8 2008R2Plus SSL (64 bit)

Please wait while the Setup Wizard installs MongoDB 6.0.8 2008R2Plus SSL (64 bit).

Status: Starting services



New Connection

Connect to a MongoDB deployment

URI

Edit Connection String

mongodb://localh

Advanced Conne

MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup

Completed the MongoDB 6.0.8 2008R2Plus SSL (64 bit) Setup Wizard

Click the Finish button to exit the Setup Wizard.

New to Compass and don't have a cluster?

If you don't already have a cluster, you can create one for free using MongoDB Atlas

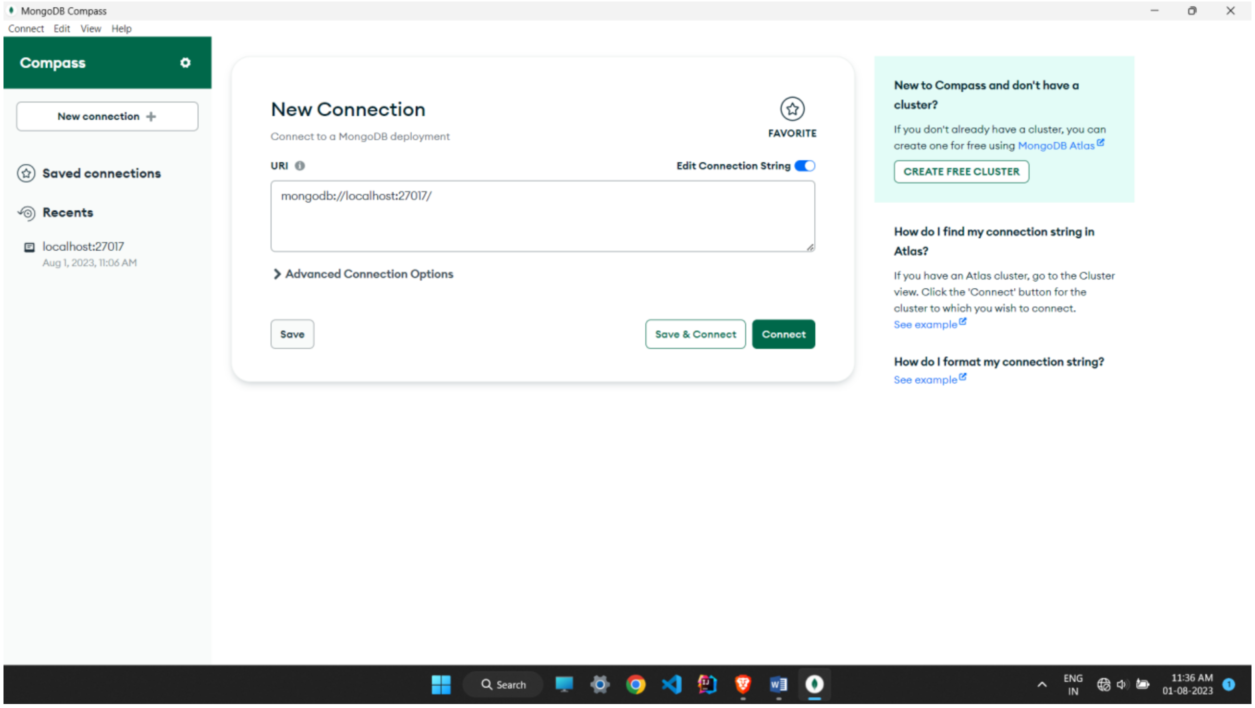
How do I find my connection string in Atlas?

If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect.

See example

How do I format my connection string?

See example



New Connection

Connect to a MongoDB deployment

URI

Edit Connection String

mongodb://localhost:27017/

Advanced Connection Options

New to Compass and don't have a cluster?

If you don't already have a cluster, you can create one for free using MongoDB Atlas

How do I find my connection string in Atlas?

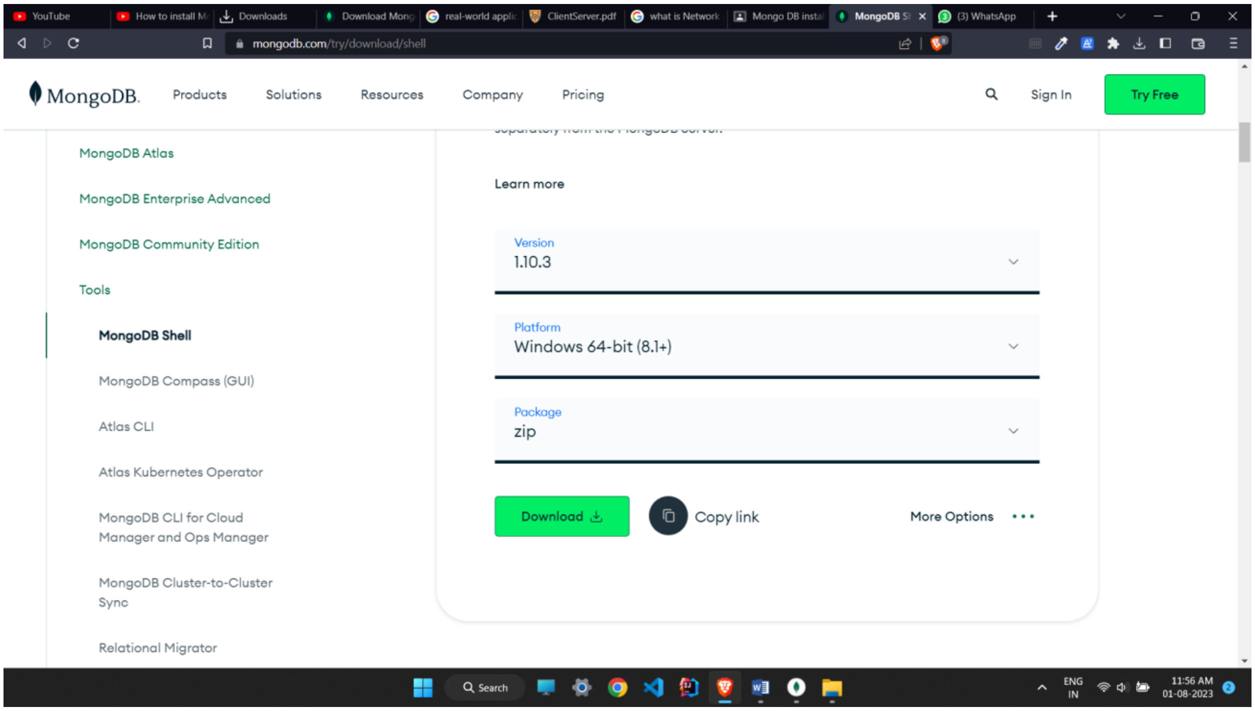
If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect.

See example

How do I format my connection string?

See example

Mongo DB shell Installation process:

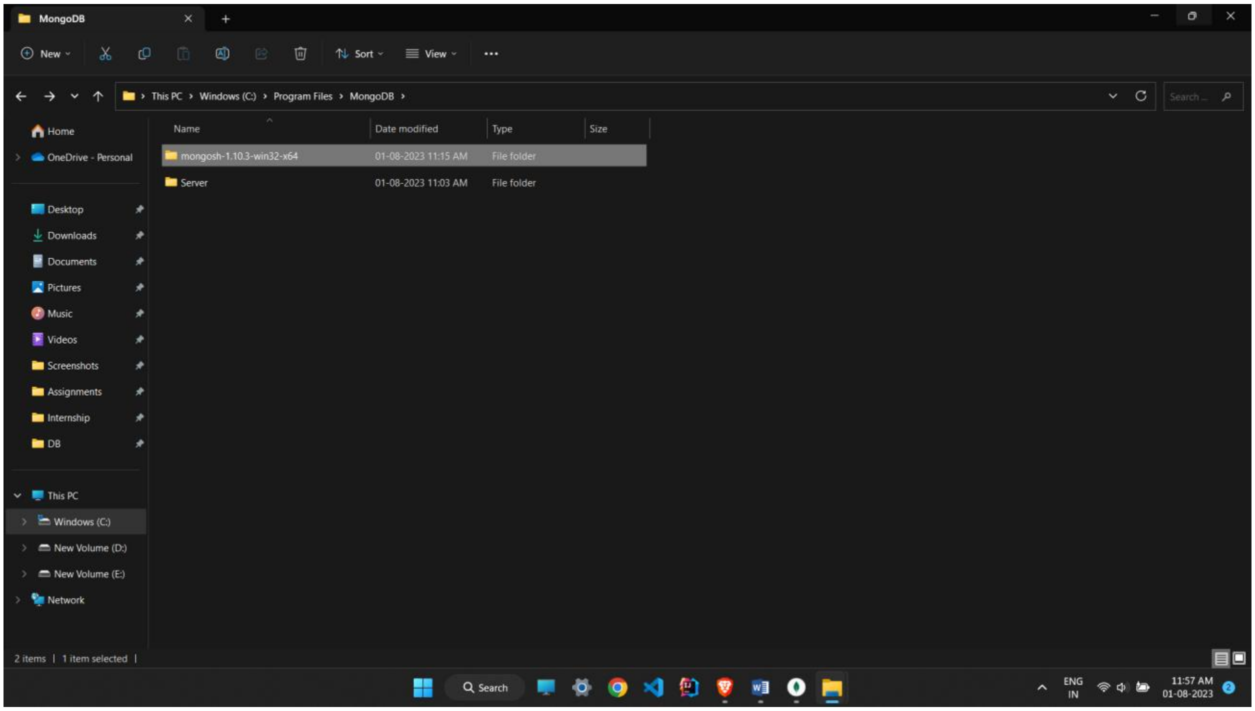


mongodb.com/try/download/shell
MongoDB.
Products
Solutions
Resources
Company
Pricing
Sign In
Try Free
MongoDB Atlas
MongoDB Enterprise Advanced
MongoDB Community Edition
Tools
MongoDB Shell
MongoDB Compass (GUI)
Atlas CLI
Atlas Kubernetes Operator
MongoDB CLI for Cloud Manager and Ops Manager
MongoDB Cluster-to-Cluster Sync
Relational Migrator
Learn more
Download
Copy link
More Options

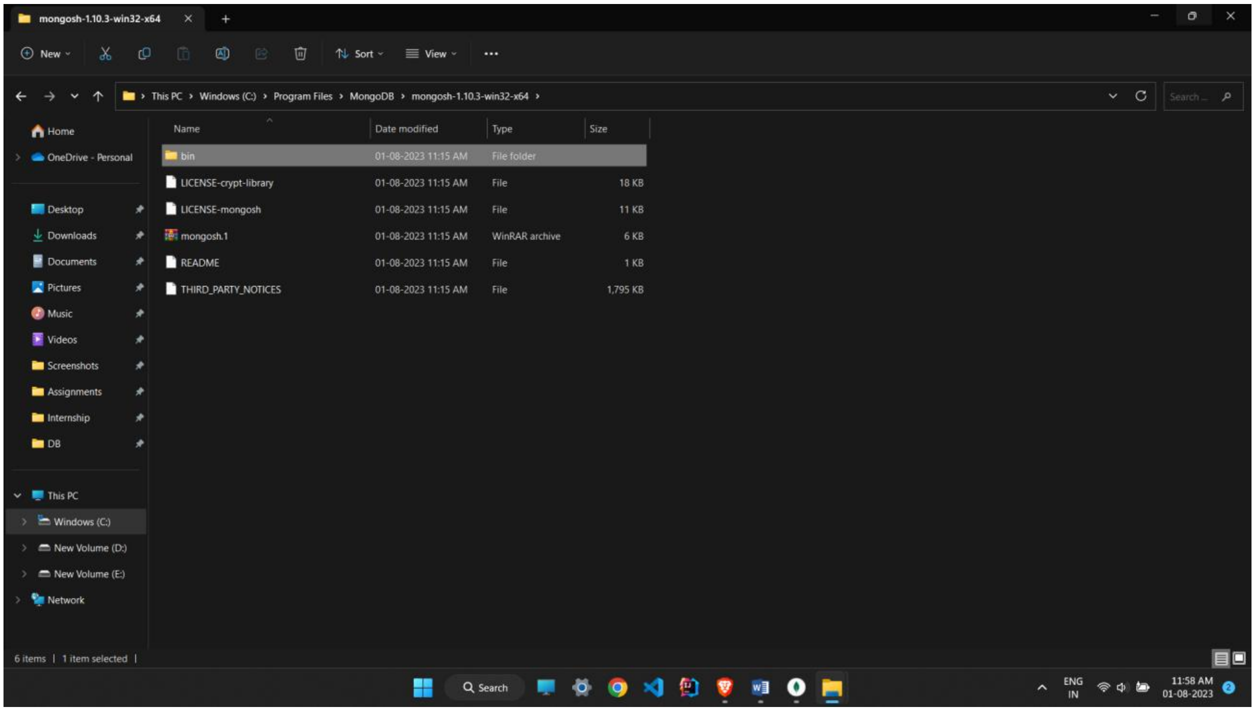
Version
1.10.3

Platform
Windows 64-bit (8.1+)

Package
zip



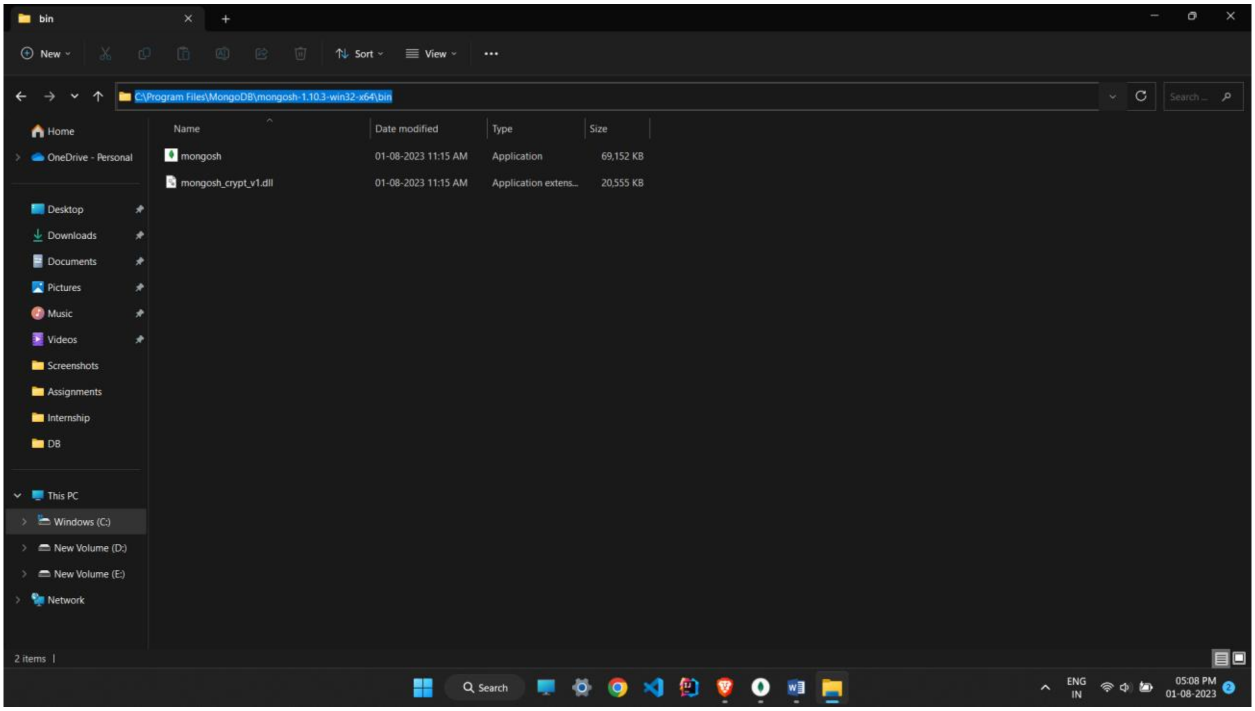
Name	Date modified	Type	Size
mongosh-1.10.3-win32-x64	01-08-2023 11:15 AM	File folder	
Server	01-08-2023 11:03 AM	File folder	



This PC › Windows (C:) › Program Files › MongoDB › mongosh-1.10.3-win32-x64 ›

Name	Date modified	Type	Size
bin	01-08-2023 11:15 AM	File folder	
LICENSE-crypt-library	01-08-2023 11:15 AM	File	18 KB
LICENSE-mongosh	01-08-2023 11:15 AM	File	11 KB
mongosh.1	01-08-2023 11:15 AM	WinRAR archive	6 KB
README	01-08-2023 11:15 AM	File	1 KB
THIRD_PARTY_NOTICES	01-08-2023 11:15 AM	File	1,795 KB

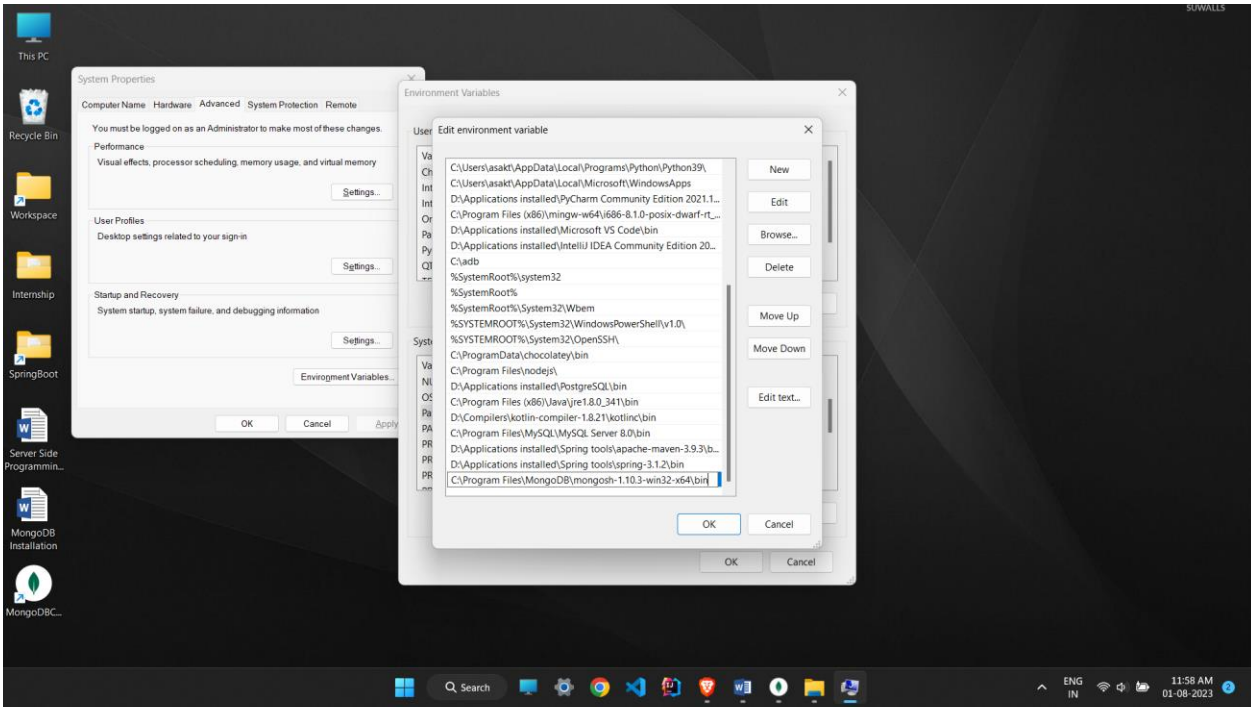
6 items | 1 item selected |



C:\Program Files\MongoDB\mongosh-1.10.3-win32-x64\bin

Name	Date modified	Type	Size
mongosh	01-08-2023 11:15 AM	Application	69,152 KB
mongosh_crypt_v1.dll	01-08-2023 11:15 AM	Application extens...	20,555 KB

2 items |



You must be logged on as an Administrator to make most of these changes.

Performance

Visual effects, processor scheduling, memory usage, and virtual memory

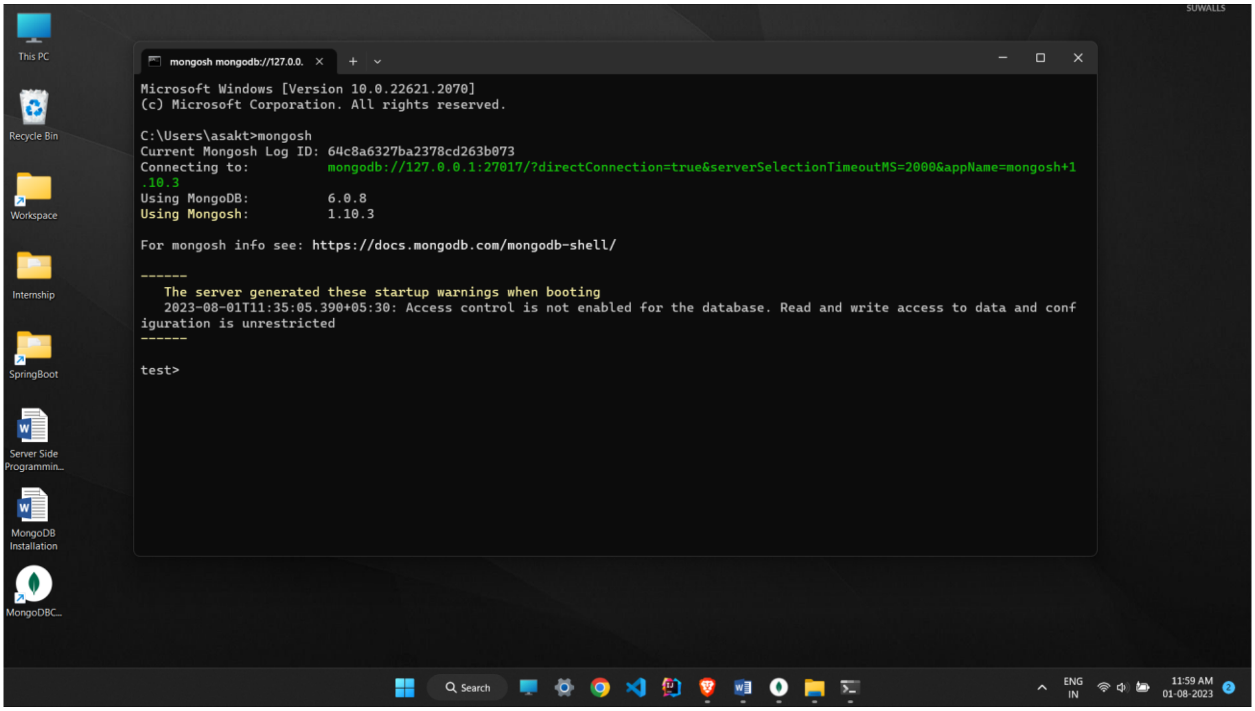
User Profiles

Desktop settings related to your sign-in

Startup and Recovery

System startup, system failure, and debugging information

```
C:\Users\asakt\AppData\Local\Programs\Python\Python39\
C:\Users\asakt\AppData\Local\Microsoft\WindowsApps
D:\Applications installed\PyCharm Community Edition 2021.1...
C:\Program Files (x86)\mingw-w64\i686-8.1.0-posix-dwarf-rt_...
D:\Applications installed\Microsoft VS Code\bin
D:\Applications installed\IntelliJ IDEA Community Edition 20...
C:\adb
%SystemRoot%\system32
%SystemRoot%
%SystemRoot%\System32\Wbem
%SYSTEMROOT%\System32\WindowsPowerShell\v1.0\
%SYSTEMROOT%\System32\OpenSSH\
C:\ProgramData\chocolatey\bin
C:\Program Files\nodejs\
D:\Applications installed\PostgreSQL\bin
C:\Program Files (x86)\Java\jre1.8.0_341\bin
D:\Compilers\kotlin-compiler-1.8.21\kotlinc\bin
C:\Program Files\MySQL\MySQL Server 8.0\bin
D:\Applications installed\Spring tools\apache-maven-3.9.3\b...
D:\Applications installed\Spring tools\spring-3.1.2\bin
C:\Program Files\MongoDB\mongosh-1.10.3-win32-x64\bin
```



```
Microsoft Windows [Version 10.0.22621.2070]
(c) Microsoft Corporation. All rights reserved.

C:\Users\asakt>mongosh
Current Mongosh Log ID: 64c8a6327ba2378cd263b073
Connecting to:          mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1
.10.3
Using MongoDB:          6.0.8
Using Mongosh:          1.10.3

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

------
   The server generated these startup warnings when booting
   2023-08-01T11:35:05.390+05:30: Access control is not enabled for the database. Read and write access to data and conf
iguration is unrestricted
------

test>
```

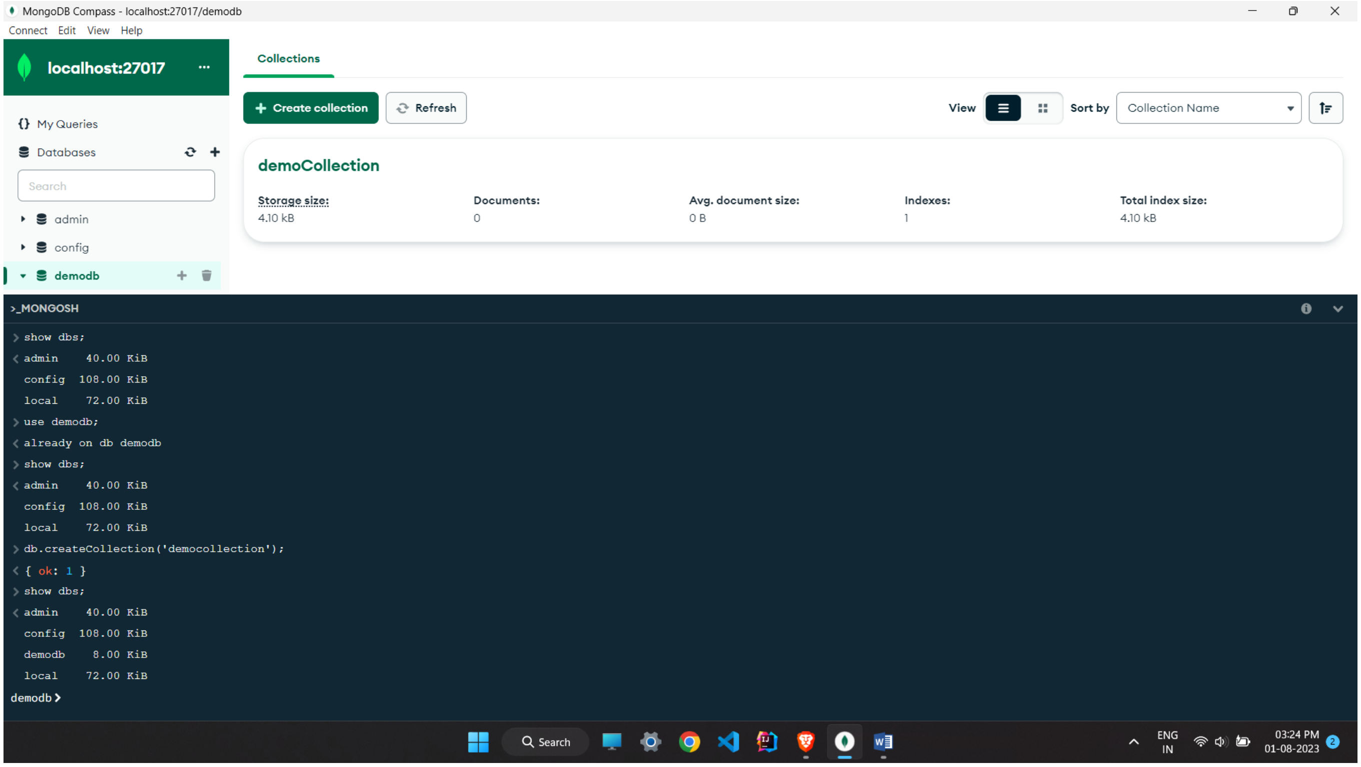
Working with Mongo DB:

Creating my first DB:

- I have created a new database called **demodb** by using the **use** keyword.
- I check the list of present databases using the **show dbs** command.

Creating by first collection:

- Then, I created a collection inside that db with a name **democollection** by using **db.createCollection('<collection_name>').**
- In mongo DB, it accepts a database only if that database have **at least one** collection or a document.
- I check the list of present collections inside my **demodb** using the **show collections** command.



Storage size: 4.10 kB
Documents: 0
Avg. document size: 0 B
Indexes: 1
Total index size: 4.10 kB

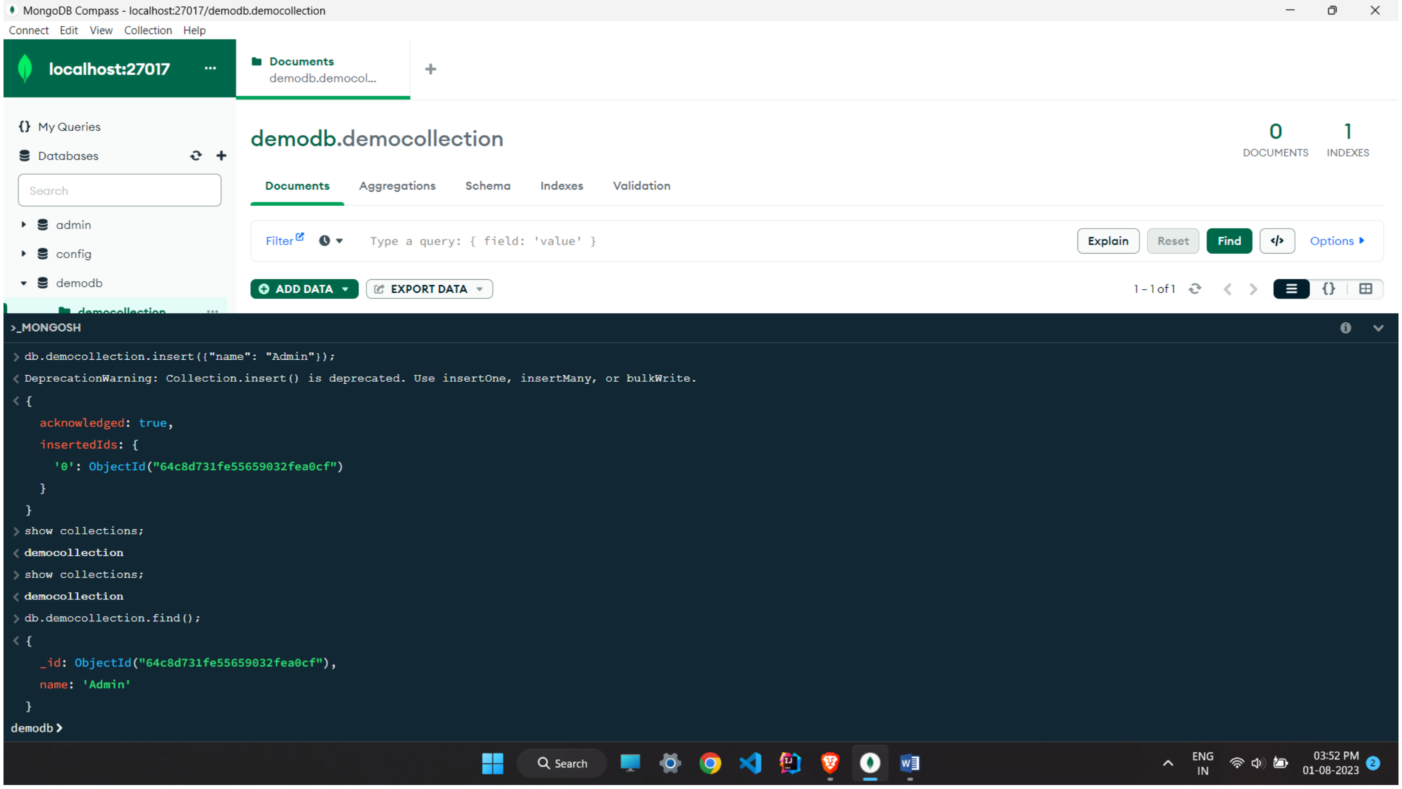
```
> show dbs;
< admin    40.00 KiB
  config  108.00 KiB
  local    72.00 KiB
> use demodb;
< already on db demodb
> show dbs;
< admin    40.00 KiB
  config  108.00 KiB
  local    72.00 KiB
> db.createCollection('democollection');
< { ok: 1 }
> show dbs;
< admin    40.00 KiB
  config  108.00 KiB
  demodb    8.00 KiB
  local    72.00 KiB
demodb >
```

Inserting a document to a collection in (key : value) pairs:

- I inserted a **key : value** pair document to my collection called **democollection** using **db.<collection_name>.insert(<key:value>).**

Retrieving document from a collection:

- I retrieved all document that, i have inserted into my collection by using the command **db.<collection_name>.find().**



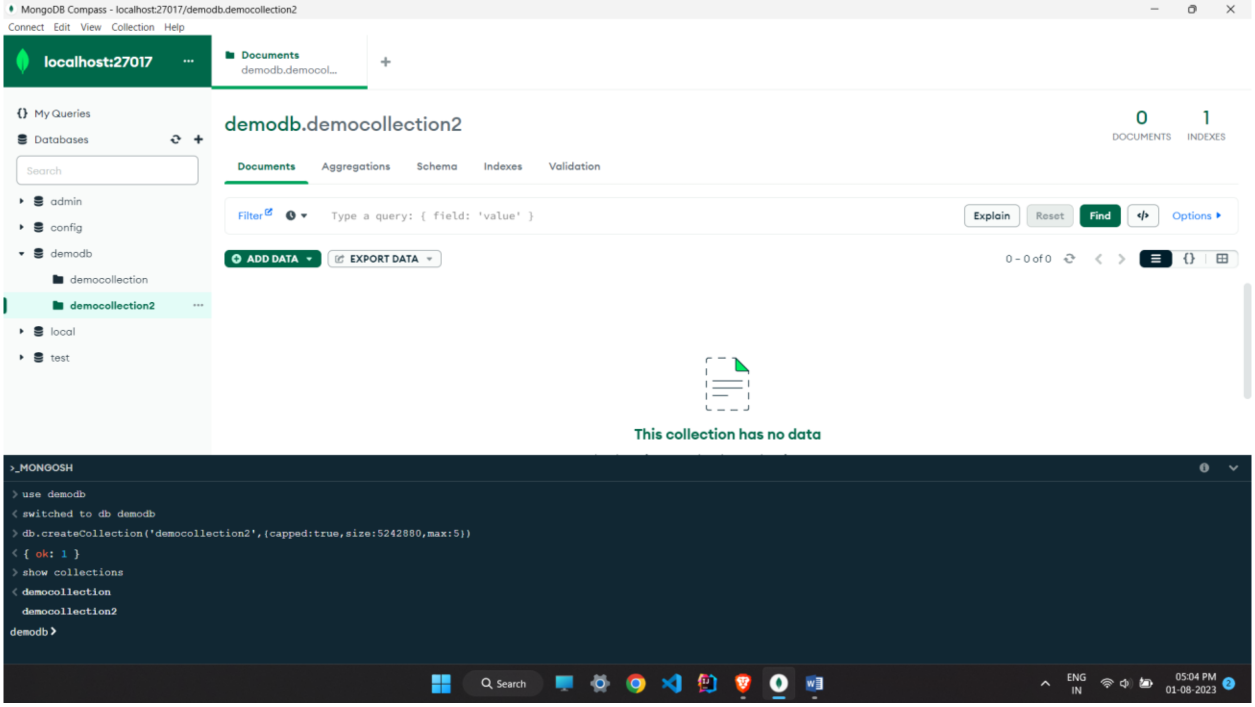
```
> db.democollection.insert({"name": "Admin"});
< DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
< {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("64c8d731fe55659032fea0cf")
    }
  }
> show collections;
< democollection
> show collections;
< democollection
> db.democollection.find();
< {
    _id: ObjectId("64c8d731fe55659032fea0cf"),
    name: 'Admin'
  }
demodb >
```

Creating another collection with additional conditions:

- I have created an another collection called **democollection2** with additional conditions by using

db.createCollection(‘<collection_name>’,’{capped:true,size:5242880,max:5)

- Where :
  - **capped** - When capped is **true** we can specify the **size** and **max** fields.
  - **size** - It indicates the **maximum size** the collection can store (Total size of all documents inside that collection must be **less than or equal to** the size mentioned).
  - **max** - It indicates the maximum number of documents the collection can store(Total size of all documents inside that collection must be **less than or equal to** the size mentioned).

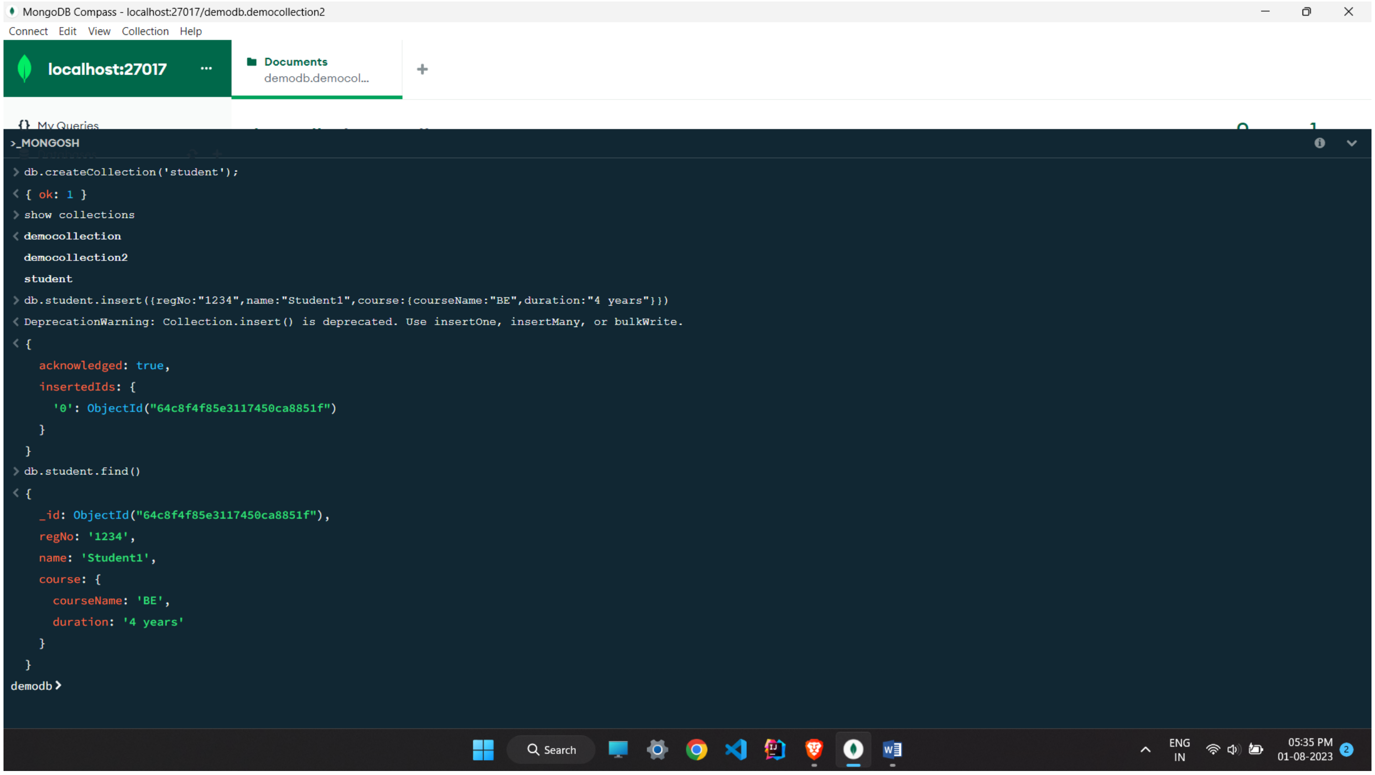


```
> use demodb
< switched to db demodb
> db.createCollection('democollection2',{capped:true,size:5242880,max:5})
< { ok: 1 }
> show collections
< democollection
  democollection2
demodb >
```

Note: Mongo DB auto generates an **unique (_id)** to all the inserted documents, we can override that (**_id**) by simply mentioning our own **_id** value to the document while inserting it.

Inserting an imbedded document:

- Here I inserted an **imbedded document** by using **db.<collection_name>.insert(<inserting_document>)**
- I **inserted** the document {regNo:"1234",name:"Student1",course:{courseName:"BE",duration:"4 years"}}
- Here in the inserted document **course** is an imbedded document.

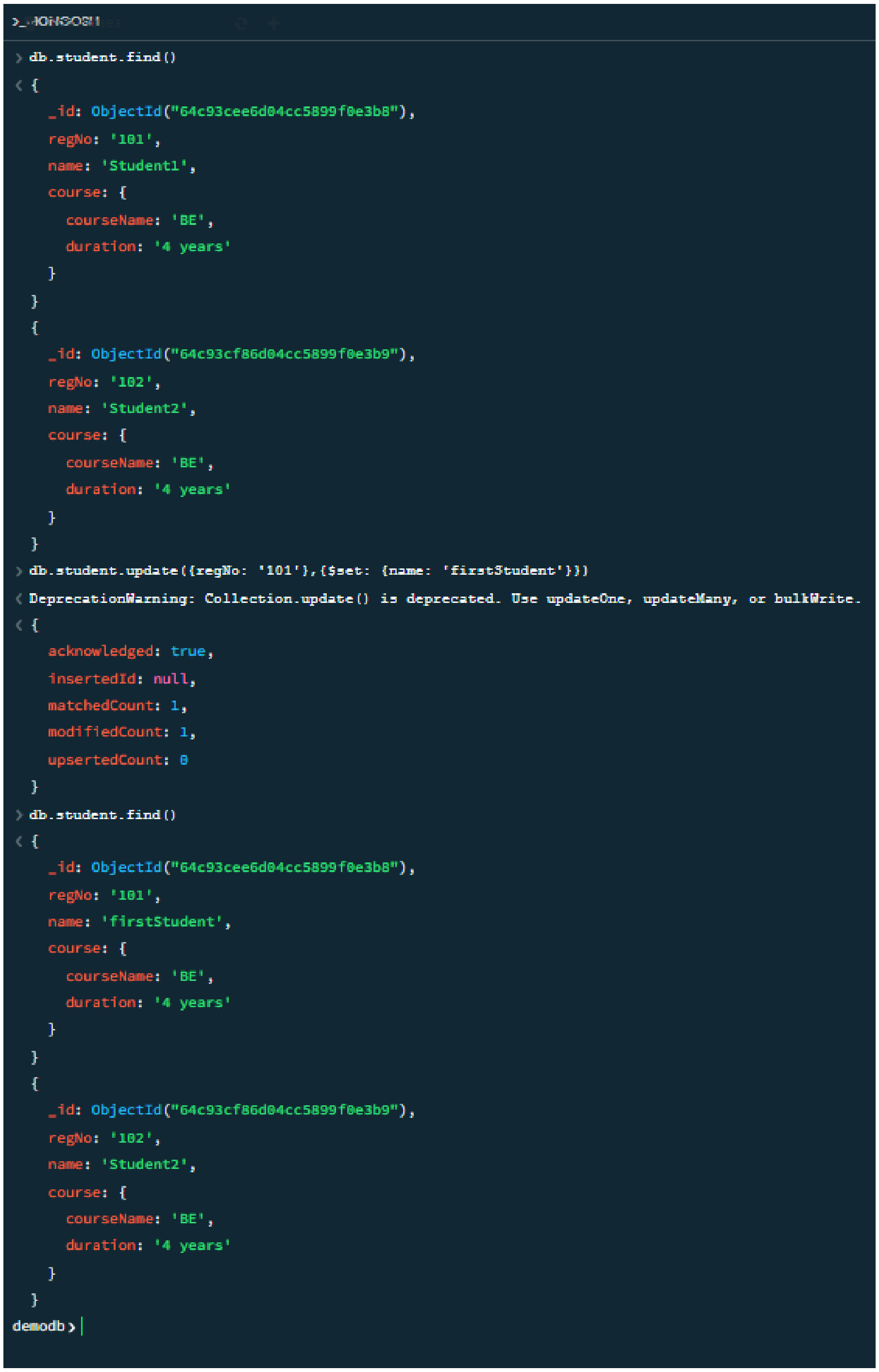

MongoDB Compass - localhost:27017/demodb.democollection2
Connect Edit View Collection Help
localhost:27017
Documents
demodb.democol...
My Queries
>_MONGOSH
Search
ENG
IN
05:35 PM
01-08-2023

```
> db.createCollection('student');
< { ok: 1 }
> show collections
< democollection
  democollection2
  student
> db.student.insert({regNo:"1234",name:"Student1",course:{courseName:"BE",duration:"4 years"}})
< DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
< {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("64c8f4f85e3117450ca8851f")
    }
  }
> db.student.find()
< {
    _id: ObjectId("64c8f4f85e3117450ca8851f"),
    regNo: '1234',
    name: 'Student1',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
demodb >
```

Updating a document in mongo DB:

- I updated a document in Mongo DB by using the **update()** method.
- There are many different update() methods available they are,
  - db.collection.updateOne()
  - db.collection.updateTwo()

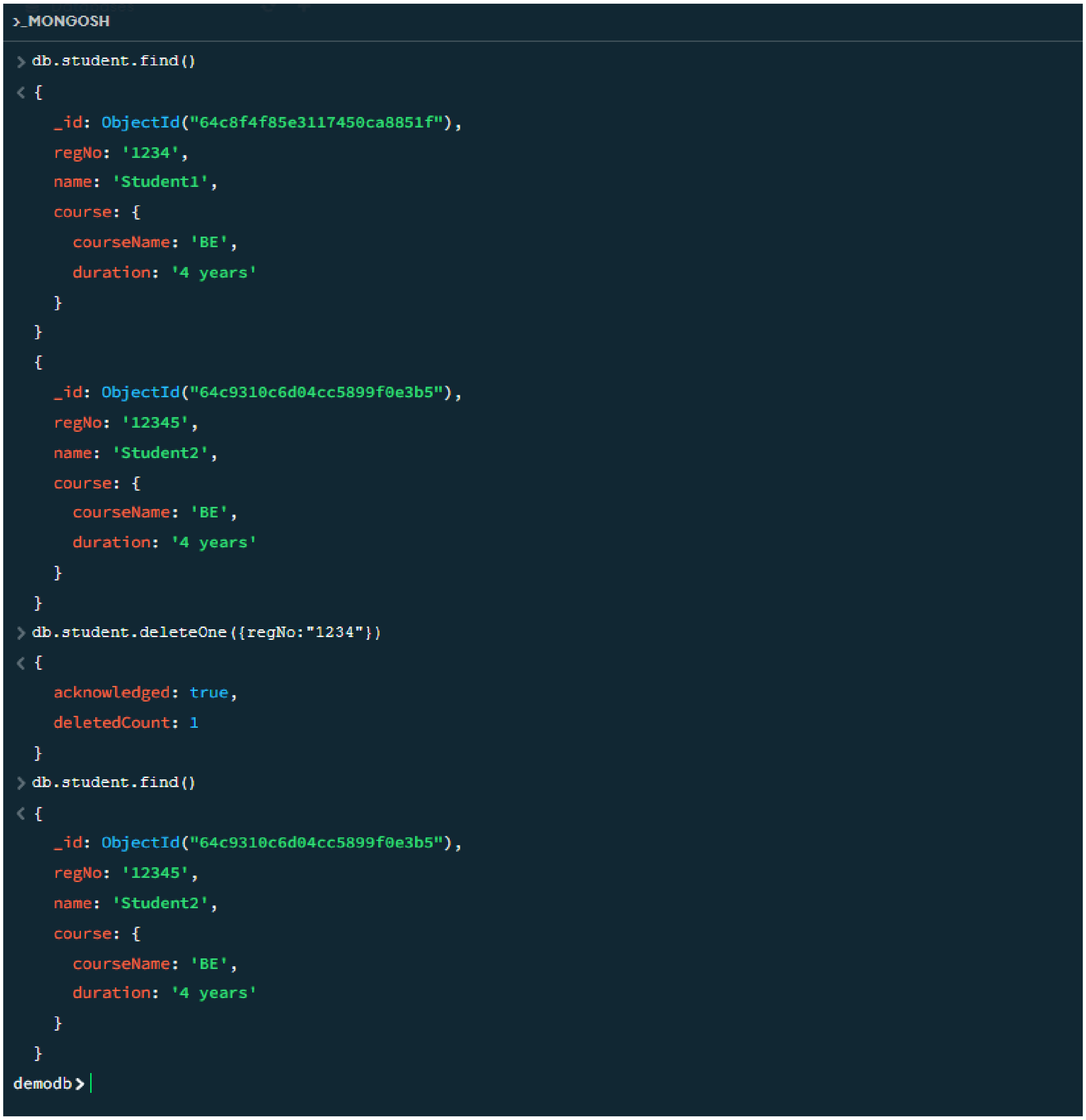
- **updateOne()** method updates only the **first matching** document which satisfies the given query or condition.
- **updateMany()** method updates the **all matching** documents which satisfies the given query or condition.



```
> db.student.find()
< {
    _id: ObjectId("64c93cee6d04cc5899f0e3b8"),
    regNo: '101',
    name: 'Student1',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
  {
    _id: ObjectId("64c93cf86d04cc5899f0e3b9"),
    regNo: '102',
    name: 'Student2',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
> db.student.update({regNo: '101'},{$set: {name: 'firstStudent'}})
< DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
< {
    acknowledged: true,
    insertedId: null,
    matchedCount: 1,
    modifiedCount: 1,
    upsertedCount: 0
  }
> db.student.find()
< {
    _id: ObjectId("64c93cee6d04cc5899f0e3b8"),
    regNo: '101',
    name: 'firstStudent',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
  {
    _id: ObjectId("64c93cf86d04cc5899f0e3b9"),
    regNo: '102',
    name: 'Student2',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
demodb >
```

Deleting a document in mongo DB:

- In Mongo DB, we can **delete** a document by using the following commands,
  - db.collection.deleteOne()
  - db.collection.deleteMany()
- By using **deleteOne()** method, we can delete the first occurring document which satisfies the given condition.
- By using **deleteMany()** method, we can delete all the documents which satisfies the given condition.



```
> db.student.find()
< {
    _id: ObjectId("64c8f4f85e3117450ca8851f"),
    regNo: '1234',
    name: 'Student1',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
  {
    _id: ObjectId("64c9310c6d04cc5899f0e3b5"),
    regNo: '12345',
    name: 'Student2',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
> db.student.deleteOne({regNo:"1234"})
< {
    acknowledged: true,
    deletedCount: 1
  }
> db.student.find()
< {
    _id: ObjectId("64c9310c6d04cc5899f0e3b5"),
    regNo: '12345',
    name: 'Student2',
    course: {
      courseName: 'BE',
      duration: '4 years'
    }
  }
demodb >
```