How to create replica set in mongodb

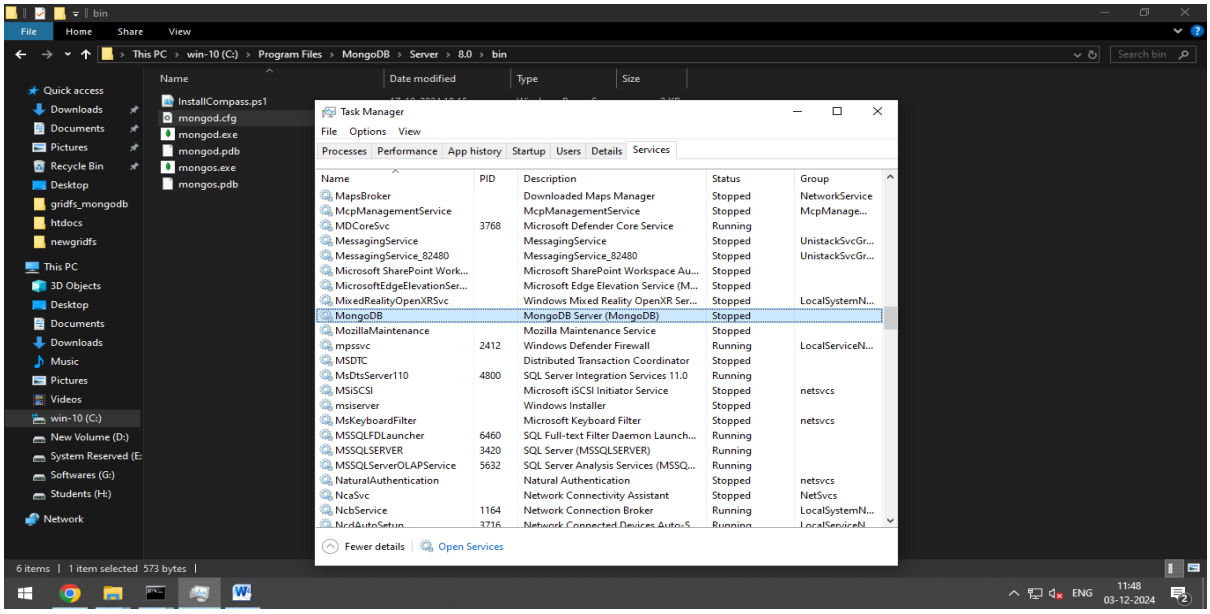
Step 1: Install MongoDB

1. **Download MongoDB**:
   - Download the MongoDB Community Edition from MongoDB's official website.
2. **Install MongoDB**:
   - Follow the installer instructions and set up MongoDB. Ensure the MongoDB bin directory is added to your system's PATH variable for ease of use.

Step 2: Create Data Directories for Each Node

1. Create separate folders for each node (e.g., `C:\data\replica1`, `C:\data\replica2`, `C:\data\replica3`).
2. Inside each directory, create a subdirectory called `db` to store the database files

Step 3: Stop Mongodb Server in taskmanager.



Step 4: Create MongoDB Instances.(C:\Program Files\MongoDB\Server\8.0\bin\mongod.cfg)

```
  path:  C:\Program Files\MongoDB\Server\7.0\log\mongod.log

# network interfaces
net:
  port: 27017
  bindIp: 127.0.0.1


#processManagement:

#security:

#operationProfiling:

#replication:
replication:
  replSetName: "rs0"
```

Open cmd

mongod --replSet "rs0" --port 27017 --dbpath C:\data\replica1\db --bind_ip localhost

Open second cmd

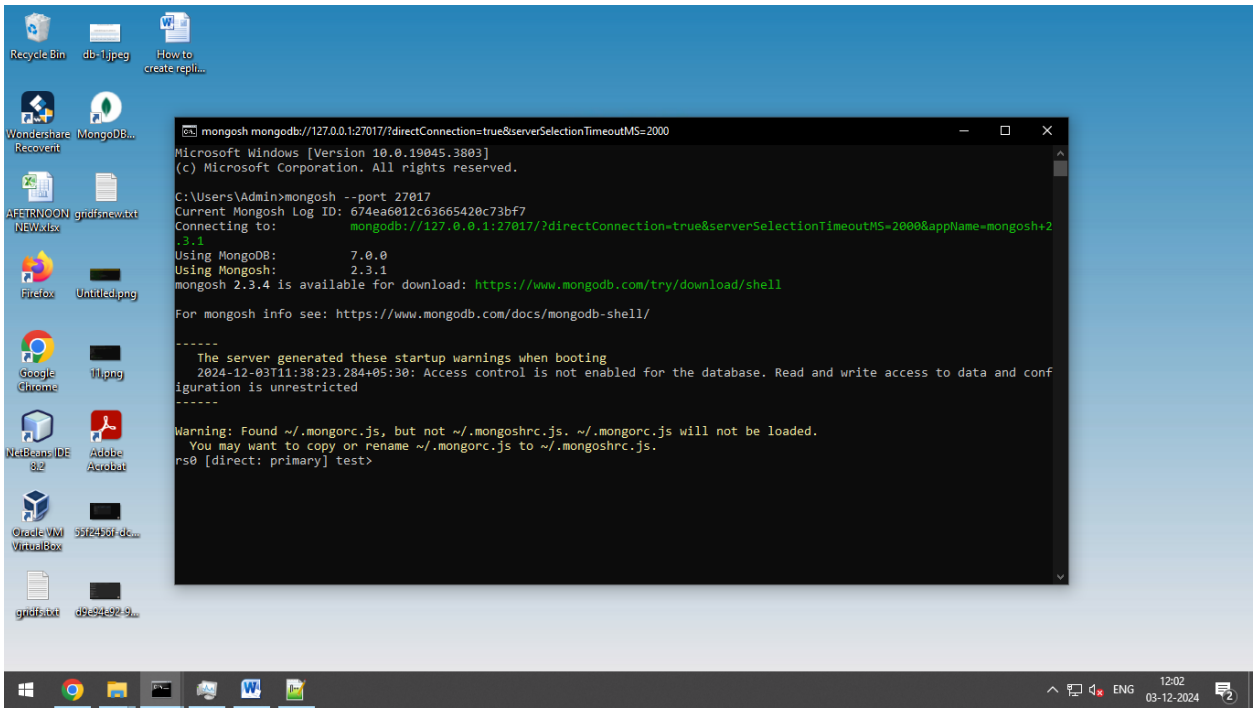
mongod --replSet "rs0" --port 27018 --dbpath C:\data\replica2\db --bind_ip localhost

Open third cmd

mongod --replSet "rs0" --port 27019 --dbpath C:\data\replica3\db --bind_ip localhost

Step 5: Connect to MongoDB and Initialize the Replica Set

1. Open another Command Prompt window.
2. Connect to one of the MongoDB instances



3. Initiate the replica set configuration
rs.initiate({ _id: "rs0", members: [{ _id: 0, host: "localhost:27017" }, { _id: 1, host: "localhost:27018" }, { _id: 2, host: "localhost:27019" }] });

Step 5: Verify the Replica Set.

rs.status()

Step 6: Test the Replica Set

Step 6: Test the Replica Set

1. Insert data into the primary node:

```
use testDB
db.testCollection.insert({ name: "MongoDB replication test" })
```

2. Connect to a secondary node and try to read the data:

```
mongosh --port 27018
```

   - Enable reading from secondaries:

```
rs.slaveOk()
db.testCollection.find()
```