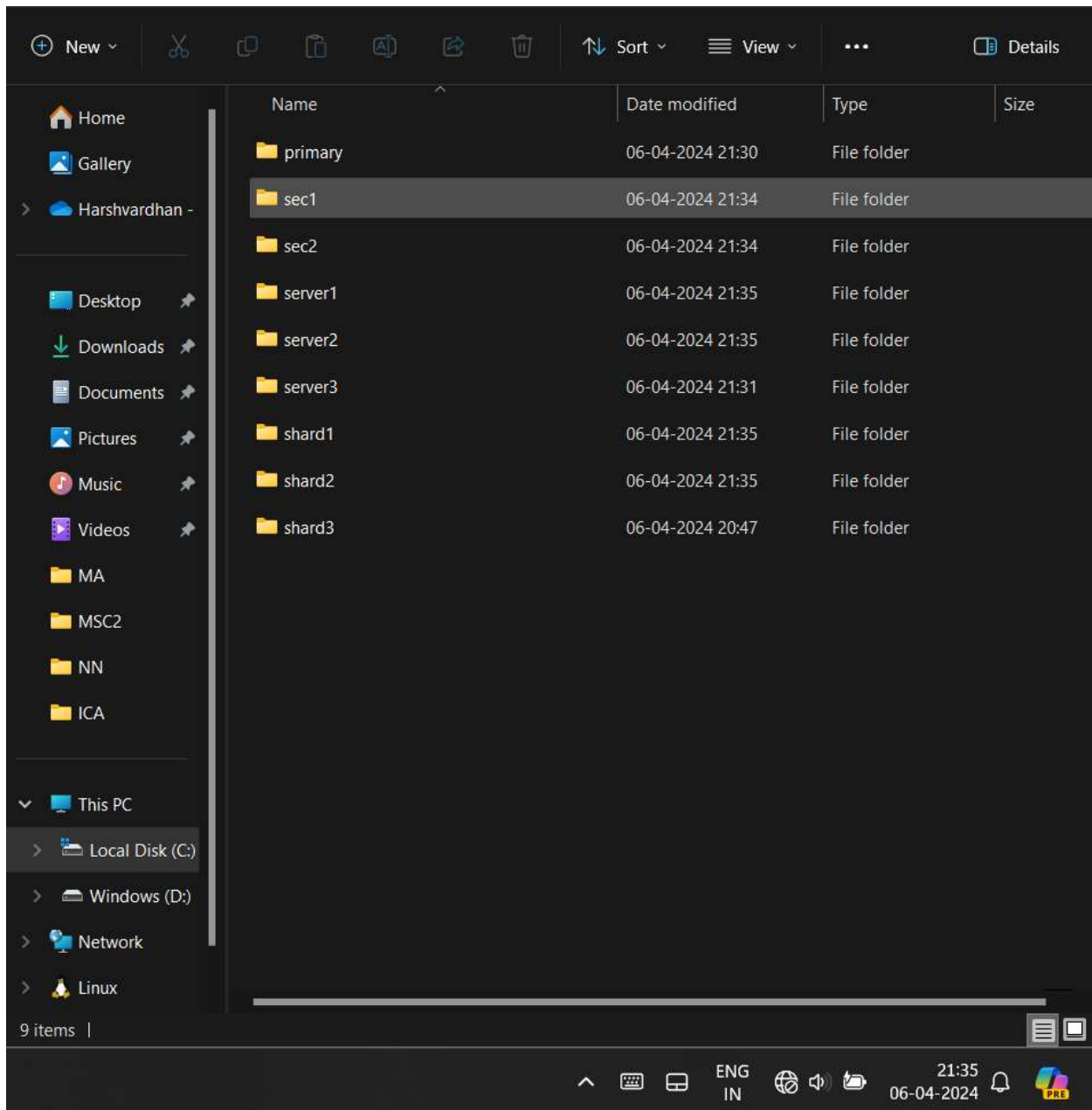


AIM :- Sharding

CODE And Output

STEP 01 : Create Folder Of Primary , Sec1 , Sec2 , Server1 , Server2, Shard1 , Shard2



STEP 02 :- start mongod --port=50001 --replSet="Server1" --dbpath="(folder path)/primary" same for all sec1 and sec2

```
C:\Windows\System32\cmd.e  X + v - □ X
Microsoft Windows [Version 10.0.22631.3374]
(c) Microsoft Corporation. All rights reserved.

C:\ICA>start mongod --port=5001 --replSet="server1" --dbpath="C:\ICA\primary"
"

C:\ICA>start mongod --port=5002 --replSet="server1" --dbpath="C:\ICA\sec1"

C:\ICA>start mongod --port=5003 --replSet="server1" --dbpath="C:\ICA\sec2"

C:\ICA>|
```

STEP 03 :- In cmd mongosh --port=5001 and then rs.initiate()

```
C:\Users\harshvardhan bhosale>mongosh --port=5001
Current Mongosh Log ID: 66116f2697a1ac04a0940889
Connecting to:      mongodb://127.0.0.1:5001/?directConn
erSelectionTimeoutMS=2000&appName=mongosh+1.5.4
Using MongoDB:      4.2.22-rc0
Using Mongosh:      1.5.4

Warning: Found ~/.mongorc.js, but not ~/.mongoshrc.js. ~/.mongorc.js will no
t be loaded.
You may want to copy or rename ~/.mongorc.js to ~/.mongoshrc.js.
test> rs.initiate({_id:"server1", members:[{_id:0 , host:'localhost:5001'},{_
_id:1 , host:'localhost:5002'},{_id:2 , host:'localhost:5003'} ] });
{ ok: 1 }
test> |
```

STEP 04 :- Config your server use this :- mongod --configsvr --port=1010 --replSet="Server1" --dbpath="(folder path)/server1" as same for all server2 and server3

```
C:\Windows\System32\cmd.e x + v - □ ×  
  
C:\ICA>mongod --configsvr --port=1010 --replSet="server1" --dbpath="C:\ICA\server1"  
2024-04-06T21:24:35.535+0530 I CONTROL [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'  
2024-04-06T21:24:35.537+0530 W ASIO [main] No TransportLayer configured during NetworkInterface startup  
2024-04-06T21:24:35.538+0530 I CONTROL [initandlisten] MongoDB starting : pid=17568 port=1010 dbpath=C:\ICA\server1 64-bit host=DESKTOP-F0CVGOT  
2024-04-06T21:24:35.538+0530 I CONTROL [initandlisten] targetMinOS: Window
```

```
Command Prompt - mongod x + v - □ ×  
  
C:\Users\harshvardhan bhosale>mongod --configsvr --port=1020 --replSet="server1" --dbpath="C:\ICA\server2"  
2024-04-06T21:25:33.655+0530 I CONTROL [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'  
2024-04-06T21:25:33.994+0530 W ASIO [main] No TransportLayer configured during NetworkInterface startup
```

STEP 05 :- open cmd and mongosh with localhost 1010

```
C:\Users\harshvardhan bhosale>mongosh --host="localhost:1010"  
Current Mongosh Log ID: 661170e013118293d0d64ade  
Connecting to: mongod://localhost:1010/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1.5.4  
Using MongoDB: 4.2.22-rc0  
Using Mongosh: 1.5.4
```

```

test> rs.initiate({
...   _id:"server1",
...   configsvr:true,
...   members:[
...     {_id:0, host:"localhost:1010"},
...     {_id:1, host:"localhost:1020"},
...     {_id:2, host:"localhost:1030"}
...   ]
... });
{
  ok: 1,
  '$gleStats': {
    lastOpTime: Timestamp({ t: 1712419086, i: 1 }),
    electionId: ObjectId("000000000000000000000000")
  },
  lastCommittedOpTime: Timestamp({ t: 0, i: 0 })
}
test> |

```

STEP 06 :- now shard the server use this :- `mongod --shardsvr --port=1130 --dbpath="(folder path)/shard1" --replSet="Server1"` use this for all other shards

```

C:\Windows\System32\cmd.e
Microsoft Windows [Version 10.0.22631.3374]
(c) Microsoft Corporation. All rights reserved.

C:\ICA>mongod --shardsvr --port=1130 --dbpath="C:\ICA\shard1" --replSet="server1"
2024-04-06T21:29:43.981+0530 I CONTROL [main] Automatically disabling TLS

```

```

Command Prompt - mongod
Microsoft Windows [Version 10.0.22631.3374]
(c) Microsoft Corporation. All rights reserved.

C:\Users\harshvardhan bhosale>mongod --shardsvr --port=1140 --dbpath="C:\ICA\shard2" --replSet="server1"
2024-04-06T21:30:16.068+0530 I CONTROL [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'

```

STEP 07 :- Mongosh -host="localhost:1140" your sharding is complete

```
C:\Users\harshvardhan bhosale>mongosh --host="localhost:1140"
Current Mongosh Log ID: 6611727ca515fef869d6b0be
Connecting to:      mongodb://localhost:1140/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1.5.4
Using MongoDB:      4.2.22-rc0
Using Mongosh:      1.5.4
```

```
You may want to copy or rename ~/.mongorc.js to ~/.mongoshrc.js.
test> rs.initiate({
...   _id:"server1",
...   members: [
...     {_id: 0, host: "localhost:1130"},
...     {_id: 1, host: "localhost:1140"},
...   ]
... });
{ ok: 1 }
test> |
```