Docker compose up

PS D:\desktop\BPOC\lab3> docker compose up -d

- [+] Running 26/26
- shard03-b Pulled

25.0s

- b7a3e92f19af Pull complete

9.9s

- ebc52c729dca Pull complete

10.4s

- configsvr02 Pulled

25.1s

- shard01-a Pulled

25.1s

- shard01-c Pulled

25.1s

- da8ef40b9eca Pull complete

9.3s

- router01 Pulled

25.1s

- 58690f9b18fc Pull complete

9.1s

- configsvr01 Pulled

25.0s

- shard03-c Pulled

25.1s

- shard03-a Pulled

25.1s

- b51569e7c507 Pull complete

9.2s

- shard02-a Pulled

25.1s

- a0dc15b16822 Pull complete

9.5s

- 6aa1ba699846 Pull complete

10.3s

- shard01-b Pulled
- 25.1s
 - 22b97876323d Pull complete
- 18.7s
- configsvr03 Pulled
- 25.1s
- fb15d46c38dc Pull complete
- 9.4s
- shard02-c Pulled
- 25.0s
- shard02-b Pulled
- 25.1s
- ed4a7b863fa1 Pull complete
- 10.1s
 - a58b030ea8e4 Pull complete
- 10.2s
 - 52e8c440d4d6 Pull complete
- 18.6s
- router02 Pulled
- 25.1s
- [+] Running 15/15
- 0.8s
- Container router-01 Started
- 7.2s
- Container shard-02-node-b Started
- 5.6s
- Container shard-03-node-b Started
- 5.6s
- Container shard-01-node-a Started
- 9.4s
- Container mongo-config-01 Started
- 10.8s
- Container mongo-config-03 Started
- 13.4s

- Container shard-03-node-c Started 11.6s
- Container shard-03-node-a Started 10.5s
- Container shard-02-node-c Started 6.8s
- Container router-02 Started 12.9s
- Container shard-02-node-a Started 14.5s
- Container mongo-config-02 Started 8.1s
- Container shard-01-node-c Started 4.7s
- Container shard-01-node-b Started

sudo sh init_rs.sh

```
PS D:\desktop\BPOC\lab3> docker-compose exec configsvr01 sh -c "mongo < /scripts/init-configserver.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("d6608b9e-15fa-4412-a87c-56e009e54be4") }
MongoDB server version: 4.0.28
{
    "operationTime": Timestamp(1671368875, 2),
    "ok": 0,
    "errmsg": "already initialized",
    "code": 23,
    "codeName": "AlreadyInitialized",
    "$gleStats" : {
        "lastOpTime" : Timestamp(0, 0),
        "electionId": ObjectId("7ffffff0000000000000001")
    },
    "$clusterTime": {
        "clusterTime": Timestamp(1671368875, 2),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
bye
PS D:\desktop\BPOC\lab3>
PS D:\desktop\BPOC\lab3> docker-compose exec shard01-a sh -c "mongo < /scripts/init-shard01.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
```

```
Implicit session: session { "id" : UUID("17b2b4c2-0fc4-40da-9b0f-6f3c8d03d954") }
MongoDB server version: 4.0.28
{
    "operationTime": Timestamp(1671368874, 1),
    "ok": 0,
    "errmsg": "already initialized",
    "codeName": "AlreadyInitialized",
    "$clusterTime": {
        "clusterTime": Timestamp(1671368874, 1),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
bye
PS D:\desktop\BPOC\lab3> docker-compose exec shard02-a sh -c "mongo < /scripts/init-shard02.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("6172740b-0733-411e-a8cc-dce274ddb6f7") }
MongoDB server version: 4.0.28
{
    "operationTime": Timestamp(1671368875, 1),
    "ok": 0,
    "errmsg": "already initialized",
    "code": 23,
    "codeName": "AlreadyInitialized",
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368875, 1),
        "signature" : {
```

```
"hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA"),
            "keyId" : NumberLong(0)
        }
    }
}
bye
PS D:\desktop\BPOC\lab3> docker-compose exec shard03-a sh -c "mongo < /scripts/init-shard03.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("a863141e-6bda-4d08-8b0a-fcd305b34709") }
MongoDB server version: 4.0.28
{
    "operationTime": Timestamp(1671368881, 1),
    "ok": 0,
    "errmsg": "already initialized",
    "code": 23,
    "codeName": "AlreadyInitialized",
    "$clusterTime": {
        "clusterTime": Timestamp(1671368881, 1),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
bye
```

```
docker-compose exec router01 sh -c "mongo < .scripts/init-router.js"
docker-compose exec router01 sh -c "mongo < /scripts/init-router.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("eaca4171-148c-49f1-a970-99a10ff57058") }
MongoDB server version: 4.0.28
{
    "shardAdded": "rs-shard-01",
    "ok" : 1,
    "operationTime": Timestamp(1671368976, 7),
    "$clusterTime": {
        "clusterTime": Timestamp(1671368976, 7),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAA"),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "shardAdded": "rs-shard-01",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 7),
    "$clusterTime": {
        "clusterTime": Timestamp(1671368976, 7),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
```

```
{
    "shardAdded": "rs-shard-01",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 7),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368976, 7),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "shardAdded": "rs-shard-02",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 12),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368976, 12),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "shardAdded": "rs-shard-02",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 12),
    "$clusterTime": {
        "clusterTime": Timestamp(1671368976, 12),
```

```
"signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "shardAdded": "rs-shard-02",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 12),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368976, 12),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "shardAdded": "rs-shard-03",
    "ok" : 1,
    "operationTime": Timestamp(1671368976, 16),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368976, 16),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
```

```
{
    "shardAdded": "rs-shard-03",
    "ok" : 1,
    "operationTime": Timestamp(1671368976, 16),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671368976, 16),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
       }
    }
}
{
    "shardAdded": "rs-shard-03",
    "ok": 1,
    "operationTime": Timestamp(1671368976, 16),
    "$clusterTime" : {
        "clusterTime" : Timestamp(1671368976, 16),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId": NumberLong(0)
        }
    }
}
bye
```

Використання згенерованих даних rides.csv

```
PS D:\desktop\BPOC\lab3> docker-compose exec router01 sh -c "mongo < /scripts/collection.js"
MongoDB shell version v4.0.28
connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("2e4c25c2-81bd-43a5-b793-248dcb1fcca7") }
MongoDB server version: 4.0.28
{
    "operationTime": Timestamp(1671374483, 3),
    "$clusterTime" : {
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),
            "keyId" : NumberLong(0)
        }
    }
}
{
    "collectionsharded": "taxi.rides",
    "collectionUUID": UUID("07e742a5-e7d4-456c-9295-556b462e76be"),
    "ok" : 1,
    "operationTime": Timestamp(1671374484, 24),
    "$clusterTime" : {
        "clusterTime": Timestamp(1671374484, 24),
        "signature" : {
            "hash": BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA"),
            "keyId" : NumberLong(0)
        }
    }
}
bye
```

PS D:\desktop\BPOC\lab3> docker-compose exec router01 sh -c "mongoimport --port 27017 -d taxi -c rides --type csv --file /data/rides.csv --headerline"

2022-12-18T14:41:26.214+0000 connected to: localhost:27017

2022-12-18T14:41:26.319+0000 imported 1000 documents

PS D:\desktop\BPOC\lab3> docker-compose exec router01 sh -c "mongo < /scripts/query.js"

MongoDB shell version v4.0.28

connecting to: mongodb://127.0.0.1:27017/?gssapiServiceName=mongodb

Implicit session: session { "id" : UUID("0f74e75c-259c-4316-b336-a22196f8fa67") }

MongoDB server version: 4.0.28

switched to db taxi

100

bye