

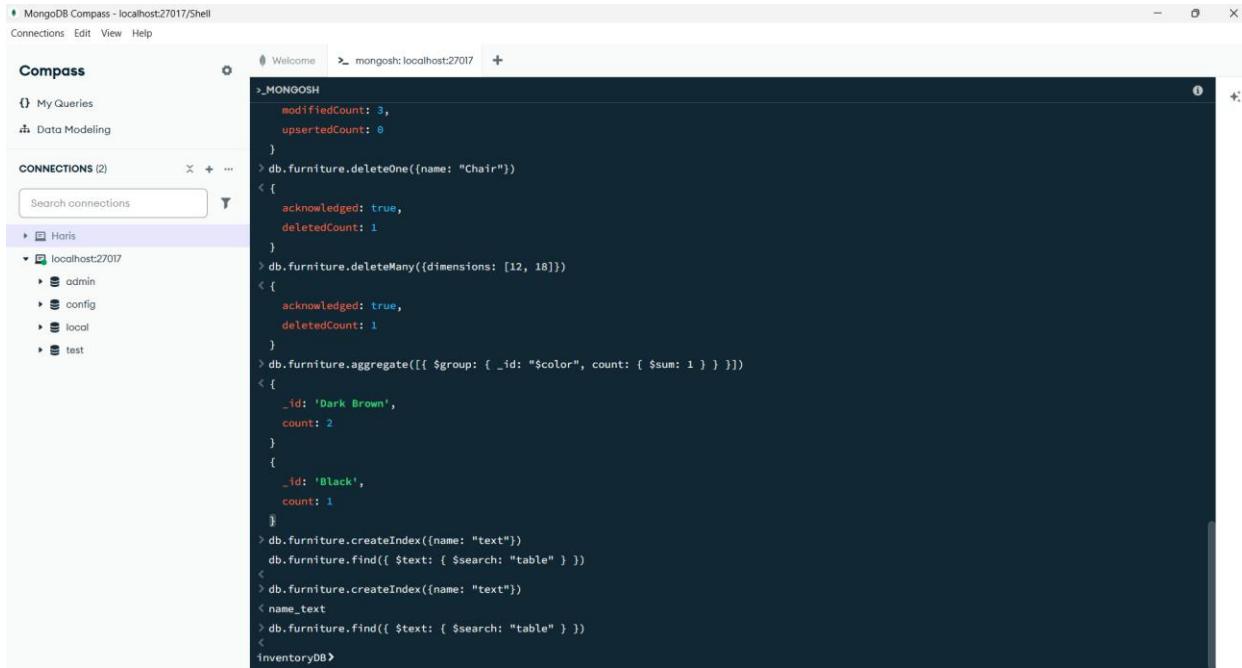
23K-6005

HARIS AHMED

BSAI-5A

DATABASE LAB 11:

LAB TASKS



The screenshot shows the MongoDB Compass interface with a terminal window open in the MONGOSH shell. The terminal displays several MongoDB commands and their results. The commands include deleting documents from the 'furniture' collection, performing an aggregate query to count furniture by color, and creating an index on the 'text' field. The results show the deletion counts, the aggregate results for colors like 'Dark Brown' and 'Black', and the creation of the index.

```
> db.furniture.deleteOne({name: "Chair"})
< 
  acknowledged: true,
  deletedCount: 1
>
> db.furniture.deleteMany({dimensions: [12, 18]})
< 
  acknowledged: true,
  deletedCount: 1
>
> db.furniture.aggregate([{"$group: { _id: "$color", count: { $sum: 1 } }}])
< 
  {
    _id: 'Dark Brown',
    count: 2
  }
  {
    _id: 'Black',
    count: 1
  }
> db.furniture.createIndex({name: "text"})
  db.furniture.find({$text: { $search: "table" } })
<
> db.furniture.createIndex({name: "text"})
< name_text
> db.furniture.find({$text: { $search: "table" } })
<
> inventoryDB
```

```
MongoDB Compass - localhost:27017/Shell
Connections Edit View Help
Compass
CONNECTIONS (2)
Search connections
localhost:27017
  Haris
  localhost:27017
    admin
    config
    local
    test
Welcome mongosh:localhost:27017 +
>_MONGOSH
  18
  ]
}
{
  _id: ObjectId('6939ee0819bc8b8c3ff9e0a3'),
  name: 'Chair',
  color: 'Brown',
  dimensions: [
    12,
    18
  ]
}
> db.furniture.updateOne({name: "Table"}, {$set: {color: "Ivory"}})
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
> db.furniture.updateMany({color: "Brown"}, {$set: {color: "Dark Brown"}})
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 3,
  modifiedCount: 3,
  upsertedCount: 0
}
> db.furniture.deleteOne({name: "Chair"})

```

```
MongoDB Compass - localhost:27017/Shell
Connections Edit View Help
Compass
CONNECTIONS (2)
Search connections
localhost:27017
  Haris
  localhost:27017
    admin
    config
    local
    test
Welcome mongosh:localhost:27017 +
>_MONGOSH
  100
  ]
}
{
  _id: ObjectId('6939ee0819bc8b8c3ff9e0a4'),
  name: 'Bed',
  color: 'Black',
  dimensions: [
    32,
    90
  ]
}
{
  _id: ObjectId('6939ee0d19bc8b8c3ff9e0a5'),
  name: 'Desk',
  color: 'Brown',
  dimensions: [
    56,
    100
  ]
}
> db.furniture.find({$and: [{color: "Brown"}, {$or: [{name: "Table"}, {name: "Chair"}]}]})
< [
  {
    _id: ObjectId('6939ee0819bc8b8c3ff9e0a2'),
    name: 'Table',
    color: 'Brown',
    dimensions: [
      12,
      18
    ]
  }
]
```

MongoDB Compass - localhost:27017/Shell

Connections Edit View Help

Compass

My Queries Data Modeling

CONNECTIONS (2)

Search connections

Haris

localhost:27017

admin config local test

>_MONGOSH

```
> use inventoryDB
< already on db inventoryDB
> db.furniture.insertMany([
  {name: "Table", color: "Brown", dimensions: [12, 18]},
  {name: "Chair", color: "Brown", dimensions: [12, 18]},
  {name: "Bed", color: "Black", dimensions: [32, 90]}
])
{
  acknowledged: true,
  insertedIds: [
    '_0': ObjectId('6939ee0819bc8b8c3ff9e0a2'),
    '_1': ObjectId('6939ee0819bc8b8c3ff9e0a3'),
    '_2': ObjectId('6939ee0819bc8b8c3ff9e0a4')
  ]
}
> db.furniture.insertOne({name: "Desk", color: "Brown", dimensions: [50, 100]})
< {
  acknowledged: true,
  insertedId: ObjectId('6939ee0d19bc8b8c3ff9e0a5')
}
> db.furniture.find({"dimensions.0": {$gt: 30}})
< [
  {
    _id: ObjectId('6939edd619bc8b8c3ff9e0a1'),
    name: 'Desk',
    color: 'Brown',
    dimensions: [
      50,
      100
    ]
  }
]
```