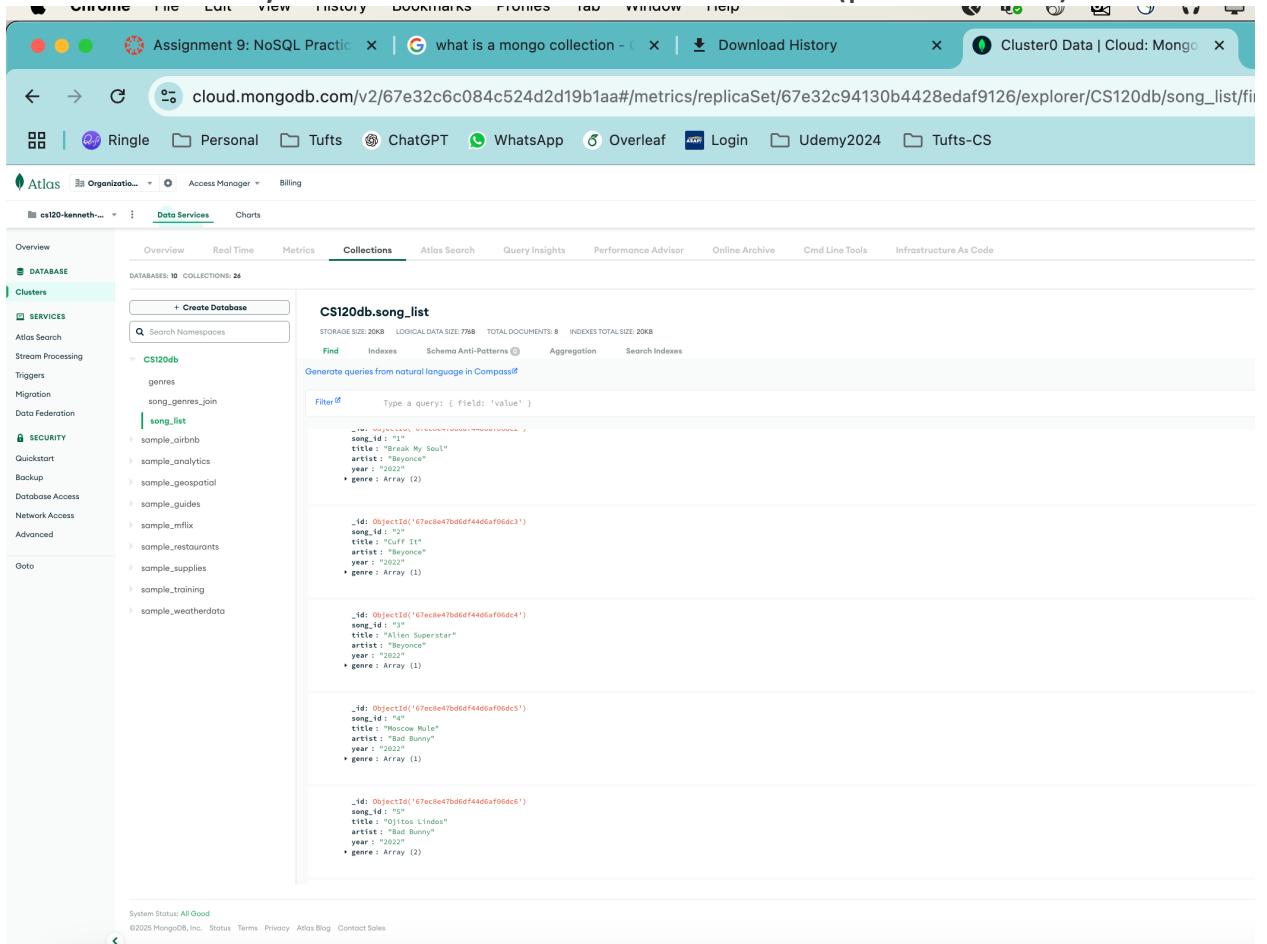


### Part 1:

❑ screen shot of your database collection in Atlas (paste below)



The screenshot shows the MongoDB Atlas interface for the CS120db database. The left sidebar shows the database structure with a 'Clusters' section and a 'SERVICES' section. The 'Clusters' section lists 'Atlas Search', 'Stream Processing', 'Triggers', 'Migration', 'Data Federation', 'SECURITY', 'Quickstart', 'Backup', 'Database Access', and 'Network Access'. The 'SERVICES' section lists 'Advanced', 'Goto', 'sample\_supplies', 'sample\_training', and 'sample\_weatherdata'. The main panel displays the 'song\_list' collection with 26 documents. The collection details show a storage size of 20KB, logical data size of 7.76B, and 8 total documents. The schema is defined as follows:

```

    {
      "_id": ObjectID("67ec8e47bd6df44d6af06dc1"),
      "song_id": "1",
      "title": "Break My Soul",
      "artist": "Beyonce",
      "year": "2002",
      "genre": Array (2)
    }
  
```

Below this, several more documents are listed, each with a similar structure. At the bottom of the main panel, there is a 'Filter' input field and a 'Type a query: { field: 'value' }' placeholder. The bottom of the interface shows a 'System Status: All Good' message and a footer with links to 'Status', 'Terms', 'Privacy', 'Atlas Blog', and 'Contact Sales'.

- ❑ Query to get all documents from one genre  
genre is: pop  
query is: { "genre" : "Pop" }  
screen shot of query running (paste below)

_id	song_id	title	artist	year	genre
ObjectId('61ec8e47bddff4466a78ddc2')	"1"	"Halo"	"Beyoncé"	"2002"	["Pop", "Dance"]
ObjectId('61ec8e47bddff4466a78ddc4')	"3"	"Single Superstar"	"Beyoncé"	"2022"	["Pop"]

- ❑ Part 2: copy/paste the query and results from the console

1. select the database  
query: use CS120db  
results:

```

[Atlas atlas-ygpbfv-shard-0 [primary] test> use cluster0
switched to db cluster0
[Atlas atlas-ygpbfv-shard-0 [primary] cluster0> use CS120db
switched to db CS120db
[Atlas atlas-ygpbfv-shard-0 [primary] CS120db> show collections
genres
song_genres_join
song_list

```

## 2. show collections in the database

query: `show collections`

results:

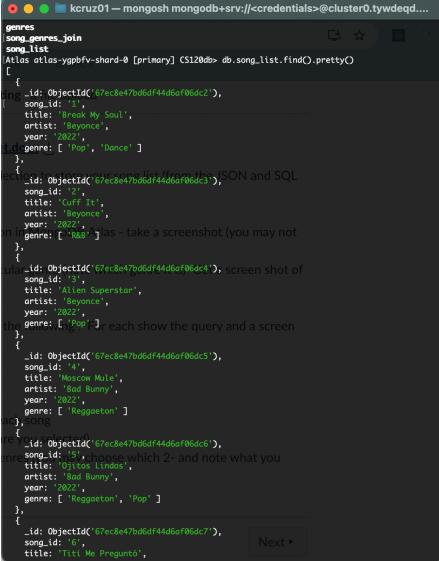


```
[Atlas atlas-ygpbfv-shard-0 [primary] test> use cluster0
switched to db cluster0
[Atlas atlas-ygpbfv-shard-0 [primary] cluster0> use CS120db
switched to db CS120db
[Atlas atlas-ygpbfv-shard-0 [primary] CS120db> show collections
genres
song_genres_join
song_list
```

## 3. show all data for all documents

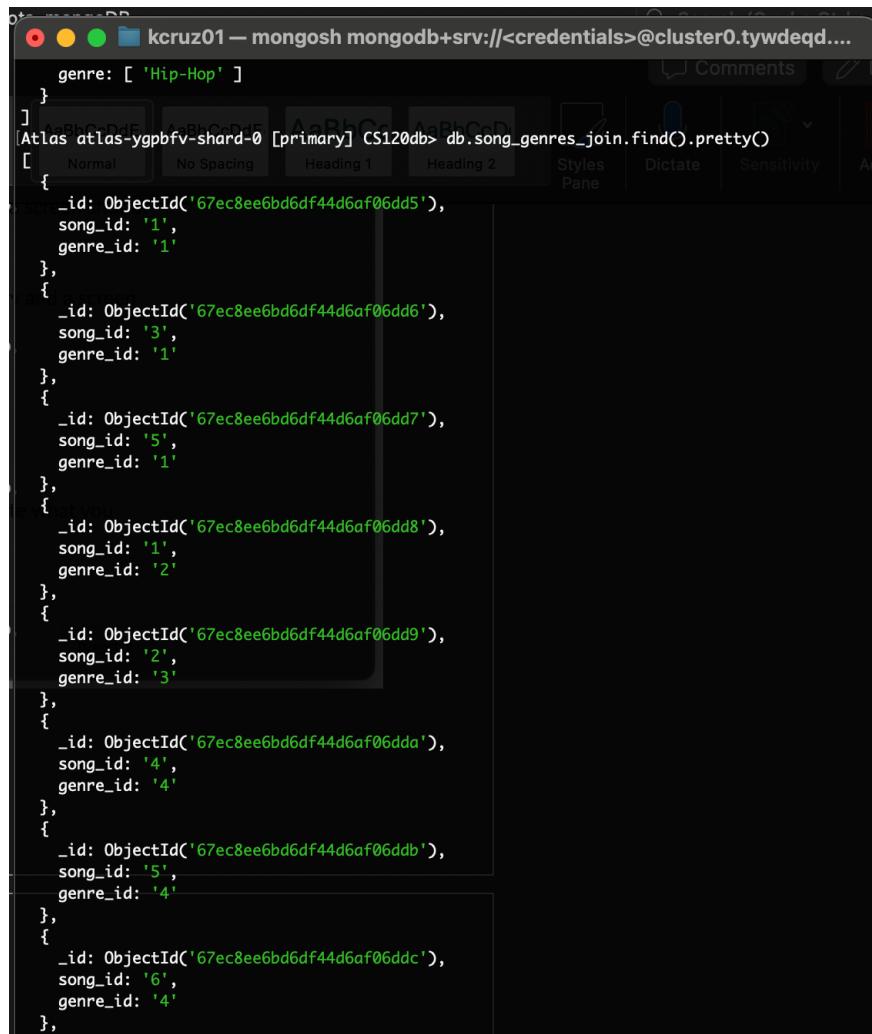
query: `db.song_list.find().pretty()`

results:



```
genres
song_genres_join
song_list
[Atlas atlas-ygpbfv-shard-0 [primary] CS120db> db.song_list.find().pretty()
[
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc2"),
    "song_id": "1",
    "title": "Break My Soul",
    "artist": "Beyonce",
    "year": "1992",
    "genre": ["Pop", "Dance"]
  },
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc3"),
    "song_id": "2",
    "title": "Cuff It",
    "artist": "Beyonce",
    "year": "2022",
    "genre": ["R&B"]
  },
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc4"),
    "song_id": "3",
    "title": "Alien Superstar",
    "artist": "Beyonce",
    "year": "2022",
    "genre": ["Pop"]
  },
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc5"),
    "song_id": "4",
    "title": "Moscow Mule",
    "artist": "Beyonce",
    "year": "2022",
    "genre": ["Reggaeton"]
  },
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc6"),
    "song_id": "5",
    "title": "Ojitos Lindos",
    "artist": "Beyonce",
    "year": "2022",
    "genre": ["Reggaeton", "Pop"]
  },
  {
    "_id": ObjectId("62ec8e47bd5df44d6af96dc7"),
    "song_id": "6",
    "title": "Tiel Me Preguntó",
    "artist": "Beyonce",
    "year": "2022",
    "genre": ["Reggaeton", "Pop"]
  }
]
```

query: \_\_\_\_ db.song\_genres\_join.find().pretty()  
results:



```
genre: [ 'Hip-Hop' ]
]
[{"_id": ObjectId('67ec8ee6bd6df44d6af06dd5'), "song_id": "1", "genre_id": "1"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06dd6'), "song_id": "3", "genre_id": "1"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06dd7'), "song_id": "5", "genre_id": "1"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06dd8'), "song_id": "1", "genre_id": "2"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06dd9'), "song_id": "2", "genre_id": "3"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06dda'), "song_id": "4", "genre_id": "4"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06ddb'), "song_id": "5", "genre_id": "4"}, {"_id": ObjectId('67ec8ee6bd6df44d6af06ddc'), "song_id": "6", "genre_id": "4"}]
```

query: \_\_\_\_ db.genres.find().pretty()

results:

```
Atlas atlas-ygpbfv-shard-0 [primary] CS120db> db.genres.find().pretty()
[
  {
    _id: ObjectId('67ec8ea5bd6df44d6af06dcf'),
    genre_id: '1',
    genre_name: 'Pop'
  },
  {
    _id: ObjectId('67ec8ea5bd6df44d6af06dce'),
    genre_id: '2',
    genre_name: 'Dance'
  },
  {
    _id: ObjectId('67ec8ea5bd6df44d6af06dcf'),
    genre_id: '3',
    genre_name: 'R&B'
  },
  {
    _id: ObjectId('67ec8ea5bd6df44d6af06dd0'),
    genre_id: '4',
    genre_name: 'Reggaeton'
  },
  {
    _id: ObjectId('67ec8ea5bd6df44d6af06dd1'),
    genre_id: '5',
    genre_name: 'Hip-Hop'
  }
]
```

4. show title, artist and genres that correspond to each song

query: \_

db.song\_list.Find({}, { title: 1, artist: 1, genre: 1, \_id: 0 })

results:

```
]
Atlas atlas-ygpbhv-shard-0 [primary] CS120db> db.song_list.find({}, { title: 1, artist: 1, genre: 1, _id: 0 })
...
[
  {
    title: 'Break My Soul',
    artist: 'Beyonce',
    genre: [ 'Pop', 'Dance' ]
  },
  { title: 'Cuff It', artist: 'Beyonce', genre: [ 'R&B' ] },
  { title: 'Alien Superstar', artist: 'Beyonce', genre: [ 'Pop' ] },
  { title: 'Moscow Mule', artist: 'Bad Bunny', genre: [ 'Reggaeton' ] },
  {
    title: 'Ojitos Lindos',
    artist: 'Bad Bunny',
    genre: [ 'Reggaeton', 'Pop' ]
  },
  {
    title: 'Tití Me Preguntó',
    artist: 'Bad Bunny',
    genre: [ 'Reggaeton' ]
  },
  { title: 'Slime You Out', artist: 'Drake', genre: [ 'Hip-Hop' ] },
  { title: 'Falling Back', artist: 'Drake', genre: [ 'Hip-Hop' ] }
]
Atlas atlas-ygpbhv-shard-0 [primary] CS120db> []
```

5. show titles for a particular genre

genre: \_\_\_Pop\_\_\_

query: \_\_\_ db.song\_list.find({ genre: "Pop" }, { title: 1, \_id: 0 })

results:

```
]
Atlas atlas-ygpbhv-shard-0 [primary] CS120db> db.song_list.find({ genre: "Pop" }, { title: 1, _id: 0 })
...
[
  { title: 'Break My Soul' },
  { title: 'Alien Superstar' },
  { title: 'Ojitos Lindos' }
]
Atlas atlas-ygpbhv-shard-0 [primary] CS120db> []
```

6. show title and artist for songs that belong to 2 genres

genres: Pop, Dance

query:

```
db.song_list.find( { genre: { $all: ["Pop", "Dance"] } }, { title: 1, artist: 1, _id: 0 } )
```

results:

```
Atlas atlas-ygpbfv-shard-0 [primary] CS120db> db.song_list.find(
...   { genre: { $all: ["Pop", "Dance"] } },
...   { title: 1, artist: 1, _id: 0 }
...
[...
[ { title: 'Break My Soul', artist: 'Beyonce' } ]
Atlas atlas-ygpbfv-shard-0 [primary] CS120db>
```