Lab 1

Task 1

Using compass, connect to local MongoDB server

- 1. Create a sample database,
- 2. create a couple of collections
- 3. create couple of documents in each collection.
- 4. Filter and analyze documents in the collection.

Task 2

Using compass, connect to the cloud server using the below configuration

Hostname: <u>cluster0-shard-00-00-ixeqq.mongodb.net</u>

Username: m001-student

Password: m001-mongodb-basics Replica Set Name: Cluster0-shard-0 Read Preference: Primary Preferred

Task 3

Which of the following field names appear in documents in the movies collection of the video database. Check all that apply.

- _id
- cast
- comments
- director
- genre
- length
- plot
- stars

Task 4

What is the value type of the ts field for documents in the 100YWeatherSmall.data collection?

- array
- coordinates
- date
- document

- double
- int32
- mixed string and int32
- mixed string and double
- string

Task 5

What is the value type of the airTemperature field for documents in the 100YWeatherSmall.datacollection?

- 1. array
- 2. coordinates
- 3. date
- 4. document
- 5. double
- 6. int32
- 7. mixed string and int32
- 8. mixed string and double
- 9. string

Task 6

What is the value type of the year field for documents in the video.movies collection?

- array
- coordinates
- date
- document
- double
- int32
- mixed string and int32
- mixed string and double
- string

Task 7

How many movies in the video collection were directed by Patty Jenkins. Stated more precisely, how many documents in the video.movies collection have a value of "Patty Jenkins" for the director field?

Task 8

How many documents in the citibike.trips collection have a tripduration that is greater than or equal to 60 and less than 65?

Task 9

Based on our shipwrecks dataset, how many shipwrecks lay off the coast of Cancun, Mexico? Choose the answer that best describes the number of shipwrecks you are able to find using Compass.

Task 10

Connect to our class Atlas cluster from Compass and view the citibike.trips collection. Use the schema view and any filters you feel are necessary to determine the range of values for the usertypefield. Which of the following are values found in this collection for the field usertype?

- null
- "Subscriber"
- "Pay As You Go"
- "Customer"
- "Anonymous"

Task 11

Connect to our class Atlas cluster from Compass and view the 100YWeatherSmall.data collection. Using the Schema view, explore the wind field. The wind field has the value type of document. Which of the following best describes the schema of this embedded document?

- Three fields -- all with the value type "document"
- Two fields -- both with the value type "document"
- Three fields -- two with the value type "string", one with the value type of "int32"
- Three fields -- two with the value type "document", one with the value type "string"
- Two fields -- one field with the value type "string", one with a value type of "document"

Task 12

Connect to the M001 class Atlas cluster from Compass and view the 100YWeatherSmall.datacollection. What is the value type of the "wind.speed.rate" field?

- document
- int32
- string
- double
- array

Task 13

Analyse the data sets and write down at least 5 examples for each of the mongoDB's features listed below.

- 1. document database
- 2. flexible schema
- 3. nested documents
- 4. geospatial queries