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Assignment:

- 1. Import `travel-sample` bucket**
- 2. Write a query to get the sum of all distances where type="route" for each airline id.**
- 3. Write queries to join(LEFT,RIGHT,INNER) type="route"&"airline" and fetch the data whose sourceairport="SFO"**
- 4. Write a mapreduce to get the number of all documents based on entities(type).**
- 5. Refer CLI interface & try to export the travel sample data. Below are the steps:**
 - a) Go to Couchbase Bin folder - C:\Program Files\Couchbase\Server\bin**
 - b) Open Command Prompt from the bin folder**

c) Run the below command to export the data from travel-sample

bucket:

```
cbexport json -c couchbase://127.0.0.1 -u &lt;USER NAME> -p &lt;password>  
-b travel-sample -o C:/travelSample.json -f lines -t 4
```

D) Create a new Bucket "NewBucket" & import the data to it:

```
cbimport json -c couchbase://127.0.0.1 -u &lt;User Name> -p &lt;password> -b  
NewBucket -f lines -d file://C:/travelSample.json -t 4 -g %id%
```

E) Once the data is imported, please attach the screenshot.

Note:

-u --& UserId which you've created

-p --& password

-b --& bucket name

1) First Query

Dashboard

Servers

Buckets

Backup

XDCR

Security

Settings

Logs

Documents

Query

Indexes

Search

Analytics

Eventing

Views

Query Editor

< history (39/39) >

bucket.scope

```
1 SELECT airlineid,
2     COUNT(airlineid) TotalCount,
3     SUM(distance) TotalDistance
4 FROM `travel-sample`
5 WHERE type="route"
6 GROUP BY airlineid;
```

Execute

Explain

Advise

success 7 min ago | elapsed: 6.2s | execution: 6.2s | docs: 214 | size: 24176 bytes

format

Query Results

Table

JSON

Tree

Plan

Plan Text

Advice

TotalCount	TotalDistance	airlineid
4	17261.08201137519	airline_2922
4	24205.29793589122	airline_5354
19	29880.419225894788	airline_90
6	4513.488243880396	airline_1946
28	16537.39825074674	airline_3935
16	20658.99433442741	airline_1925
28	121250.51601142721	airline_3200

Data Insights

data

1 collection

_default

scope

2 docs

schema 1

100.0%

gamesim-sample

1 collection

_default

scope

586 docs

travel-sample

6 collections

_default

scope

31593 docs

'stops' = 0, 'type' = "route": 77.1%

'type' = "landmark": 13.4%

'type' = "hotel": 2.3%

'type' = "airline": 0.5%

'type' = "airport": 6.7%

Inventory

scope

2)second Query(inner join)

Servers

Buckets

Backup

XDCR

Security

Settings

Logs

Documents

Query

Indexes

Search

Analytics

Eventing

Views

Query Editor

1 SELECT *

2 FROM `travel-sample` righ

3 JOIN `travel-sample` lef ON righ.airlineid = META(lef).id

Execute

Explain

Advise

success 2 min ago | elapsed: 832ms | execution: 832ms | docs: 183 | size: 669038 bytes

format

Query Results

Table

JSON

Tree

Plan

Plan Text

Advice

```
1 {
2 {
3   "lef": {
4     "callsign": "JETBLUE",
5     "country": "United States",
6     "iata": "B6",
7     "icao": "JBH",
8     "id": "3029",
9     "name": "JetBlue Airways",
10    "type": "airline"
11  },
12  "righ": {
```

Data Insights

data

1 cc

_default

scope

schema 1

gamesim-sample

1 cc

_default

scope

5

travel-sample

6 col

_default

scope

315

'stops' = 0, 'type' = "route": 77.1%

'type' = "landmark": 13.4%

'type' = "hotel": 2.3%

'type' = "airline": 0.5%

'type' = "airport": 6.7%

Inventory

scope

Refresh

Query 3.1(right join)

Servers

Buckets

Backup

XDCR

Security

Settings

Logs

Documents

Query

Indexes

Search

Analytics

Eventing

Views

Query Editor

1 SELECT *

2 FROM `travel-sample` righ

3 right JOIN `travel-sample` lef ON righ.airlineid = META(lef).id

4 WHERE righ.sourceairport = "SFO" limit 10

Execute

Explain

Advise

success just now | elapsed: 2.6s | execution: 2.6s | docs: 10 | size: 35139 bytes

format

Query Results

Table

JSON

Tree

Plan

Plan Text

Advice

```
1 {
2 {
3   "lef": {
4     "callsign": "CITRUS",
5     "country": "United States",
6     "iata": "FL",
7     "icao": "TRS",
8     "id": "1316",
9     "name": "AirTran Airways",
10    "type": "airline"
11  },
12  "righ": {
```

Data Insights

data

1 collec

_default

scope

2 c

schema 1

100

gamesim-sample

1 collec

_default

scope

586 c

travel-sample

6 collecti

_default

scope

31593 c

'stops' = 0, 'type' = "route": 77.1%

'type' = "landmark": 13

'type' = "hotel": 2

'type' = "airline": 0

'type' = "airport": 6

Inventory

scope

Refresh

Query 3.2(left join)

The screenshot displays the Couchbase Query Console interface. On the left, a sidebar contains navigation links: Servers, Buckets, Backup, XDCR, Security, Settings, Logs, Documents, Query (selected), Indexes, Search, Analytics, and Eventing. The main area shows a SQL query:

```
1 SELECT *
2 FROM `travel-sample` righ
3 left JOIN `travel-sample` lef ON righ.airlineid = META(lef).id
4 WHERE righ.sourceairport = "SFO" limit 10
```

Below the query, there are buttons for 'Execute', 'Explain', and 'Advise'. A status bar indicates 'success just now | elapsed: 93.7ms | execution: 93.7ms | docs: 10 | size: 33556 bytes'. The 'Query Results' section shows a JSON array of documents. The first document is expanded, showing fields like 'airline', 'airlineid', 'destinationairport', 'distance', 'equipment', 'id', and 'schedule'. On the right, a 'data' sidebar shows a collection of documents, including 'gamesim-sample' and 'travel-sample', with a 'Refresh' button at the bottom.

Query 4

The screenshot displays the Couchbase Query Console interface for a MapReduce query. The 'Map' section contains a JavaScript function:

```
1 function (doc, meta) {
2   if(doc.type=="route")
3     emit(meta.id, null);
4 }
```

The 'Reduce' section is labeled 'Reduce (built in: _count, _sum, _stats)' and contains a single line of code: '1 _count'. Below the code, there are buttons for 'Results', 'filter', and 'Show Results'. The 'Results' section shows a table with two columns: 'Key' and 'Value'. The table contains one row with the key 'null' and the value '34'.

Query 5.1

```
C:\Program Files\Couchbase\Server\bin>cbexport json -c couchbase://127.0.0.1 -b travel-sample -o C:\Users\HP\Desktop\travelSample.json -f lines -t 4 -u Administrator -p
scope-field _default -p
Password:
2021-01-12T19:34:12.357+05:30 WARN: (Couchbase) Unexpected error 'operation timed out after 5s' while trying to get sequence numbers, will retry in 5s -- couchbase.GetSequenceNumbers() at sequence_numbers.go:39
2021-01-12T19:34:27.360+05:30 WARN: (Couchbase) Unexpected error 'operation timed out after 10s' while trying to get sequence numbers, will retry in 10s -- couchbase.GetSequenceNumbers() at sequence_numbers.go:39
JSON exported to 'C:\Users\HP\Desktop\travelSample.json' successfully
Documents exported: 63184 Documents skipped: 0
```

Query 5.2

```
C:\Program Files\Couchbase\Server\bin>cbimport json -c couchbase://127.0.0.1 -u Administrator -b data -f lines -d file://C:/travelSample.json -t 4 -g %id% -p
Password:
2021-01-12T20:32:57.205+05:30 ERRO: Failed to import document 7581: Error in key expression at char 0, field 'id' does not exist -- jsontdata.(*JSONSource).handleError(
) at source.go:379
2021-01-12T20:32:58.398+05:30 ERRO: Failed to import document 19916: Error in key expression at char 0, field 'id' does not exist -- jsontdata.(*JSONSource).handleError(
) at source.go:379
JSON import failed: 63182 documents were imported, 2 documents failed to be imported
JSON import failed: Some errors occurred while transferring data, see logs for more details

C:\Program Files\Couchbase\Server\bin>
```