Sai Apoorva Vedangi   **vedangi.apoorva@accolite.digital.com**

Assignment:NO SQL   **Spring AU 21**

_____

Questions

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 <USER NAME> -p <password>

-b travel-sample -o C:/travelSample.json -f lines -t 4

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

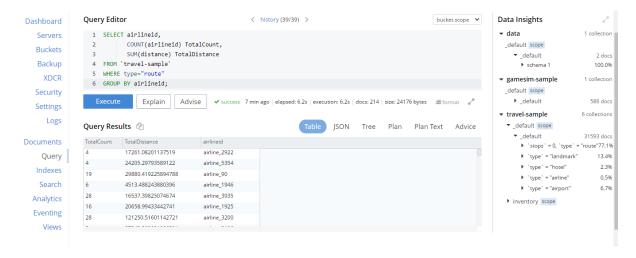cbimport json -c couchbase://127.0.0.1 -u <User Name> -p <password> -b

NewBucket -f lines -d file://C:/travelSample.json -t 4 -g %id%

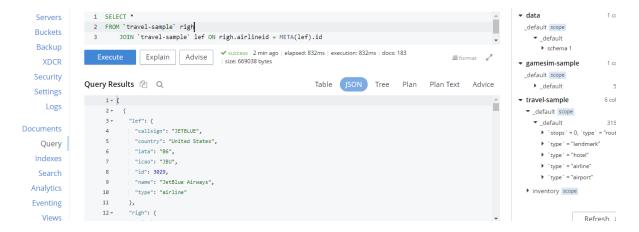E) Once the data is imported, please attach the screenshot.

Note:

-u --> UserId which you've created

-p --> password

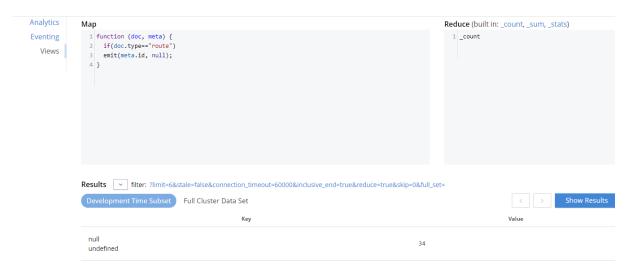-b --> bucket name

1) First Query(sum(distance))

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`
    - _default   2 docs
      - ▶ schema 1   100.0%
- ▼ gamesim-sample   1 collection
  - _default `scope`
    - ▶ _default   586 docs
- ▼ travel-sample   6 collections
  - ▼ _default `scope`
    - ▼ _default   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)

```
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   Q   Table JSON Tree Plan Plan Text Advice

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

- ▼ data   1 cc
  - _default `scope`
    - ▼ _default
      - ▶ schema 1
- ▼ gamesim-sample   1 cc
  - _default `scope`
    - ▶ _default   5
- ▼ travel-sample   6 col
  - ▼ _default `scope`
    - ▼ _default   315
      - ▶ `stops` = 0, `type` = "rout
      - ▶ `type` = "landmark"
      - ▶ `type` = "hotel"
      - ▶ `type` = "airline"
      - ▶ `type` = "airport"
  - ▶ inventory `scope`

Refresh

Query 2.1(right join)

```
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   Q   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   1 collec
  - _default `scope`
    - ▼ _default   2 c
      - ▶ schema 1   100
- ▼ gamesim-sample   1 collec
  - _default `scope`
    - ▶ _default   586 c
- ▼ travel-sample   6 collecti
  - ▼ _default `scope`
    - ▼ _default   31593 c
      - ▶ `stops` = 0, `type` = "route"77
      - ▶ `type` = "landmark"   13
      - ▶ `type` = "hotel"   2
      - ▶ `type` = "airline"   0
      - ▶ `type` = "airport"   6
  - ▶ inventory `scope`

Query 4(left join)


```
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
```

Query 4

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

Reduce (built in: _count, _sum, _stats)
```
1  _count
```

Results   filter: ?limit=6&stale=false&connection_timeout=60000&inclusive_end=true&reduce=true&skip=0&full_set=

Key	Value
null undefined	34

Query 5.1

Exporting the json


```
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 -
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.Get
equenceNumbers() 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.G
tSequenceNumbers() at sequence_numbers.go:39
JSON exported to `C:\Users\HP\Desktop\travelSample.json` successfully
Documents exported: 63184 Documents skipped: 0
```

Query 5.2

Importing

```
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 -- jsondata.(*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 -- jsondata.(*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>
```