


# AU 2021 - NoSQL Basics & Fundamentals

## Assignment:

Submitted by-Shubham Sharma

1. Import `travel-sample` bucket

 **Test > Buckets**

[Dashboard](#)  
[Servers](#)  
[Buckets](#)  
[XDCR](#)

name ▾	items	resident
travel-sample	31,591	100%

2. Write a query to get the sum of all distances where type="route" for each airline id.

Query Editor

< history (21/21) >



```
1 SELECT id,sum(distance) FROM `travel-sample`  
2 WHERE type = "route" group by id
```

Execute

Explain

External Query Advisor ✓ success just now | elapsed: 3.5s | execution: 3.5s | docs: 24024  
| size: 1445796 bytes

format

Query Results

Table

JSON

Tree

Plan

Plan Text

\$1	id
2909.1672473517383	59971
107.7076492073885	59939
696.9564350074816	25029
8235.303233035123	14742
2508.731131389859	57213
1682.9211310940939	27085
992.9973127819152	63544
1197.2157312856605	62740
1747.7963738666306	12127
775.5437991859698	5605
344.79717400745494	20230

3. Write queries to join(LEFT,RIGHT,INNER) type="route"&"airline" and fetch the data whose sourceairport="SFO"

Query Editor

< history (41/41) >



```
1 SELECT airline.sourceairport, airline.destinationairport, airline.airlineid, airport.name  
2 FROM `travel-sample` airline  
3 inner JOIN `travel-sample` airport ON KEYS airline.airlineid where airline.sourceairport='SFO';
```

Execute

Explain

External Query Advisor ✓ success just now | elapsed: 56ms | execution: 56ms | docs: 183  
| size: 26848 bytes

format

Query Results

Table

JSON

Tree

Plan

Plan Text

airlineid	destinationairport	name	sourceairport
airline_3029	AUS	JetBlue Airways	SFO
airline_3029	BOS	JetBlue Airways	SFO
airline_3029	DXB	JetBlue Airways	SFO
airline_3029	FLL	JetBlue Airways	SFO
airline_3029	JFK	JetBlue Airways	SFO
airline_3029	LGB	JetBlue Airways	SFO
airline_1355	LHR	British Airways	SFO
airline_2009	AMS	Delta Air Lines	SFO
airline_2009	ATL	Delta Air Lines	SFO

# AU 2021 - NoSQL Basics & Fundamentals

Query Editor < history (44/44) >

```
1 SELECT airline.sourceairport, airline.destinationairport, airline.airlineid, airport.name
2 FROM `travel-sample` airline
3 left JOIN `travel-sample` airport ON KEYS airline.airlineid where airline.sourceairport='SFO';
```

Execute Explain External Query Advisor ✓ success just now | elapsed: 55ms | execution: 55ms | docs: 249 | size: 34198 bytes format

Query Results Table JSON Tree Plan Plan Text

airlineid	destinationairport	name	sourceairport
airline_218	HKG		SFO
airline_218	ICN		SFO
airline_321	ATL		SFO
airline_321	BJX		SFO
airline_321	GDL		SFO
airline_321	MEX		SFO
airline_321	MLM		SFO
airline_321	PVR		SFO

Query Editor < history (53/53) >

```
1 SELECT r.sourceairport,
2       r.destinationairport,
3       r.airlineid,
4       a.name
5 FROM `travel-sample` r RIGHT
6 JOIN `travel-sample` a ON r.airlineid
7 WHERE r.sourceairport = "SFO"
```

Execute Explain External Query Advisor ✓ success just now | elapsed: 410.8ms | execution: 410.8ms | size: 214857 bytes

Query Results Table JSON

airlineid	destinationairport	name	sourceairport
airline_218	HKG	40-Mile Air	SFO
airline_218	ICN	40-Mile Air	SFO
airline_321	ATL	40-Mile Air	SFO
airline_321	BJX	40-Mile Air	SFO
airline_321	GDL	40-Mile Air	SFO
airline_321	MEX	40-Mile Air	SFO

4. Write a mapreduce to get the number of all documents based on entities(type).

Map

```
1 function (doc, meta) {
2   emit(meta.id, doc.type, null);
3 }
```

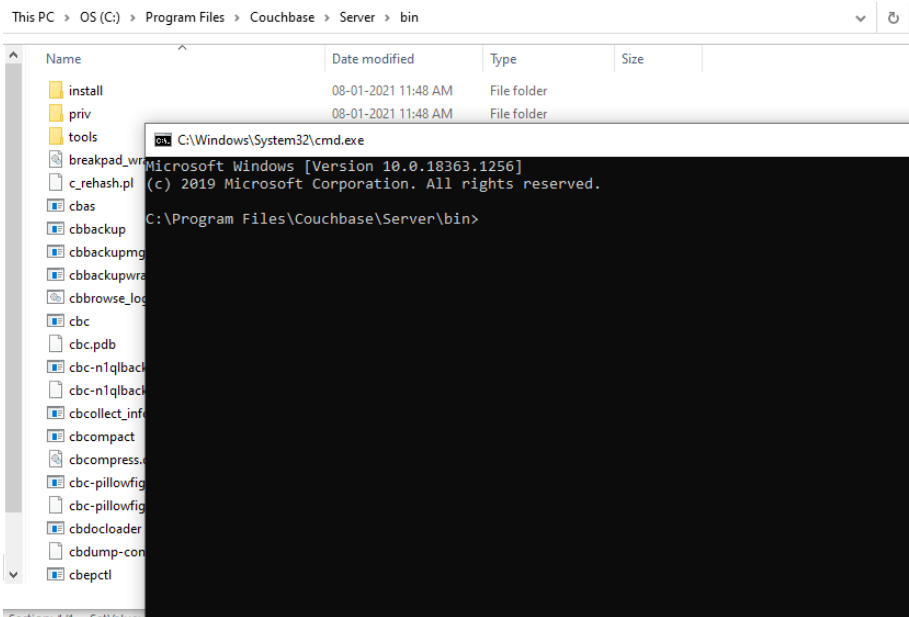
Reduce (built in: \_count, \_sum, \_stats)

```
1 _count
```

\$1	type
1968	airport
917	hotel
4495	landmark
24024	route
187	airline

5. Refer CLI interface & try to export the travel sample data. Below are the steps:
- Go to Couchbase Bin folder - C:\Program Files\Couchbase\Server\bin
  - Open Command Prompt from the bin folder

# AU 2021 - NoSQL Basics & Fundamentals



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

```
C:\Program Files\Couchbase\Server\bin>cbexport json -c couchbase://127.0.0.1 -u admin -p 123456 -b travel-sample -o C:/travelSample.json -f lines -t 4
Json exported to `C:/travelSample.json` successfully
Documents exported: 31591 Documents skipped: 0

C:\Program Files\Couchbase\Server\bin>cbimport json -c couchbase://127.0.0.1 -u admin -p 123456 -b NewBucket -f lines -d file://C:/travelSample.json -t 4 -g %id%
JSON `file://C:/travelSample.json` imported to `http://127.0.0.1:8091` successfully
Documents imported: 31591 Documents failed: 0
```