

# NoSQL Assignment

Nandhini R

## 1. Import "Travel\_sample" bucket

The screenshot shows the 'AU2021 > Buckets' interface. On the left is a sidebar with links: Dashboard, Servers, Buckets (selected), XDCR, Security, and Settings. The main area has a search bar 'filter buckets...' and a table of buckets. The 'travel-sample' bucket is highlighted with a green bar. Below the table are links for 'Documents' and 'Scopes & Collections'.

name	items	resident	ops/sec	RAM used/quota	disk used
travel-sample	63,182	96%	0	113MB / 200MB	58.7MB

## 2. Distance by airline\_id

select airlineid,sum(distance) as sum from `travel-sample` where type="route" group by airlineid;

The screenshot shows the 'AU2021 > Query' interface. The 'Query Editor' has a text area with the query: `1 select airlineid,sum(distance) as sum from `travel-sample` where type="route" group by airlineid ;`. Below the editor are 'Execute' and 'Explain' buttons. To the right, status information shows 'success' and execution details. Below the editor, the 'Query Results' section shows a table with 2 columns: 'airlineid' and 'sum'. The results are displayed in a table format.

airlineid	sum
airline_5347	721869.8731022599
airline_1316	1016607.16456096
airline_1889	78697.85590931853
airline_5309	38524.79945722503
airline_2009	4656328.83529257
airline_1629	16815.929575571783
airline_3778	22824.183329251013
airline_5360	125427.4274931057
airline_1942	12518.82782417514

## 3. JOINS

SELECT \* FROM `travel-sample` left\_doc INNER

JOIN `travel-sample` right\_doc ON left\_doc.airlineid = META(right\_doc).id

WHERE left\_doc.sourceairport = "SFO"

LIMIT 10;

RIGHT:

## Query Editor

< history (26/26) >

bucket.scope ▾

```
1 SELECT *
2 FROM `travel-sample` left_doc RIGHT
3 JOIN `travel-sample` right_doc ON left_doc.airlineid = META(right_doc).id
```

Execute

Explain

External Query Advisor ✓ success 1 min ago | elapsed: 5s | execution: 5s | docs: 10  
size: 35239 bytes

format ↗

## Query Results

Table

JSON

Tree

Plan

Plan Text

```
1 [
2 {
3   "left_doc": {
4     "airline": "FL",
5     "airlineid": "airline_1316",
6     "destinationairport": "ATL",
7     "distance": 3434.7108309317646,
8     "equipment": "73G",
9     "id": 25480,
10    "schedule": [
11      {
12        "day": 0,
```

## LEFT:

## Query Editor

< history (27/27) >

bucket.scope ▾

```
1 SELECT *
2 FROM `travel-sample` left_doc LEFT
3 JOIN `travel-sample` right_doc ON left_doc.airlineid = META(right_doc).id
```

Execute

Explain

External Query Advisor ✓ success just now | elapsed: 203.8ms | execution: 203.8ms | docs: 10  
size: 33596 bytes

format ↗

## Query Results

Table

JSON

Tree

Plan

Plan Text

```
1 [
2 {
3   "left_doc": {
4     "airline": "AI",
5     "airlineid": "airline_218",
6     "destinationairport": "HKG",
7     "distance": 11128.182035009515,
8     "equipment": "77W",
9     "id": 10624,
10    "schedule": [
11      {
12        "day": 0,
```

## INNER:

Query Editor < history (29/29) > bucket.scope

```
1 SELECT *
2 FROM `travel-sample` left_doc INNER
3 JOIN `travel-sample` right_doc ON left_doc.airlineid = META(right_doc).id
```

[Execute](#) [Explain](#) [External Query Advisor](#) ✓ success just now | elapsed: 53.2ms | execution: 53.2ms | docs: 10  
| size: 37441 bytes [format](#) [↗](#)

Query Results [🔗](#) [🔍](#) Table **JSON** Tree Plan Plan Text

```
1 [
2 {
3   "left_doc": {
4     "airline": "B6",
5     "airlineid": "airline_3029",
6     "destinationairport": "AUS",
7     "distance": 2416.0035377223094,
8     "equipment": "320",
9     "id": 14239,
10    "schedule": [
11      {
12        "date": "2014-01-01T00:00:00Z",
13        "time": "06:00",
14        "type": "departure",
15        "value": 14239
16      },
17      {
18        "date": "2014-01-01T00:00:00Z",
19        "time": "06:00",
20        "type": "arrival",
21        "value": 14239
22      }
23    ]
24  }
25 }
```

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

View Index Code Make Copy Save C

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&skip=0&full\_set=

[Development Time Subset](#) [Full Cluster Data Set](#) < > [Show](#)

Key	Value
null	
undefined	


38

## 5. Export and import

cbexport json -c couchbase://127.0.0.1 -u nandhini -p nandy.2008\ -b default -o data/travelSample.json -f lines -t 4

```
C:\Program Files\Couchbase\Server\bin>cbexport json -c couchbase://127.0.0.1 -u nandhini -p nandy.2008 -b sample -o C:/travelSample.json -f lines -t 4
JSON exported to 'C:/travelSample.json' successfully
Documents exported: 0 Documents skipped: 0

C:\Program Files\Couchbase\Server\bin>cbimport json -c couchbase://127.0.0.1 -u nandhini -p nandy.2008 -b NewBucket -f lines -d file://C:/travelSample.json -t 4 -g %id%
JSON 'file://C:/travelSample.json' imported to 'couchbase://127.0.0.1' successfully
Documents imported: 0 Documents failed: 0
```

 AU2021 > Buckets

ADD BUCKET

ashboard  
Servers  
Buckets  
XDCR  
Security  
Settings  
Logs  
ocuments

filter buckets...

name ▾

Items

resident

ops/sec

RAM used/quota

disk used

NewBucket

0

100%

0

27.6MB / 200MB

4.07MB

[Documents](#)

[Scopes & Collections](#)

sample

0

100%

0

27.6MB / 4.35GB

4.07MB

[Documents](#)

[Scopes & Collections](#)