

Zormene Kinanee

CSCI 3287: Design and Analysis of Data systems

Project 3: NoSQL Lab – Cassandra

1. Create a keyspace (schema or “collection”) (4):

```
cqlsh> create keyspace sample_keyspace1 with replication={'class':'SimpleStrategy','replication_factor':1};
cqlsh> describe keyspaces;

sample_keyspace  system_auth  sample_keyspace1  system_traces
system_schema    system        system_distributed
```

2. Use a keyspace (4):

```
[cqlsh> use sample_keyspace1;
cqlsh:sample_keyspace1> █
```

3. Describe a keyspace (4):

```
cqlsh:sample_keyspace1> describe keyspaces;

sample_keyspace  system_auth  sample_keyspace1  system_traces
[system_schema    system        system_distributed

cqlsh:sample_keyspace1> describe sample_keyspace1;

CREATE KEYSPACE sample_keyspace1 WITH replication = {'class': 'SimpleStrategy', 'replication_factor': '1'}
AND durable_writes = true;

cqlsh:sample_keyspace1> █
```

4. Create and Describe a table (column family) (6):

```
[cqlsh:sample_keyspace1> create table sample_keyspace1.user_info(email_id text PRIMARY KEY,first_name text,
last_name text,object_id uuid, phone_number text);
```

```
[cqlsh:sample_keyspace1> describe tables;

user_info

cqlsh:sample_keyspace1>
```

5. Insert a new row (4)

```
[cqlsh:sample_keyspace1> insert into sample_keyspace1.user_info(email_id, first_name,last_name,object_id,phone_number) values
('zoki4037@colorado.edu','Zormene','kinanee',d0b941ea-1efd-365e-a4fb-4c9de7396840,'3039992222');
```

```
[cqlsh:sample_keyspace1> select * from sample_keyspace1.user_info;

email_id          | first_name | last_name | object_id          | phone_number
-----+-----+-----+-----+-----
zoki4037@colorado.edu | Zormene   | kinanee   | d0b941ea-1efd-365e-a4fb-4c9de7396848 | 3039992222

(1 rows)
cqlsh:sample_keyspace1>
```

View of new row inserted

6. Create an index (4)

```
[cqlsh:sample_keyspace1> create index if not exists my_index on sample_keyspace1.user_info(phone_number);
cqlsh:sample_keyspace1>
```

7. Update a value (4)

```
[cqlsh:sample_keyspace1> update sample_keyspace1.user_info set first_name='Glory' where email_id='zoki4037@colorado.edu';
cqlsh:sample_keyspace1>
```

```
[cqlsh:sample_keyspace1> select * from sample_keyspace1.user_info;

email_id          | first_name | last_name | object_id          | phone_number
-----+-----+-----+-----+-----
zoki4037@colorado.edu | Glory     | kinanee   | d0b941ea-1efd-365e-a4fb-4c9de7396848 | 3039992222

(1 rows)
```

8. Add/Drop/Rename a column (9)

Add:

```
[cqlsh:sample_keyspace1> alter table sample_keyspace1.user_info add dob text;
[cqlsh:sample_keyspace1> describe user_info

CREATE TABLE sample_keyspace1.user_info (
  email_id text PRIMARY KEY,
  dob text,
  first_name text,
  last_name text,
  object_id uuid,
  phone_number text
)
```

^ output

Drop:

```
[cqlsh:sample_keyspace1> alter table sample_keyspace1.user_info drop dob;
[cqlsh:sample_keyspace1> describe user_info;

CREATE TABLE sample_keyspace1.user_info (
  email_id text PRIMARY KEY,
  first_name text,
  last_name text,
  object_id uuid,
  phone_number text
)
```

^ Output

9. Run a select query (5)

```
[cqlsh:sample_keyspace1> select * from sample_keyspace1.user_info;

email_id | first_name | last_name | object_id | phone_number
-----+-----+-----+-----+-----
zoki4837@colorado.edu | Glory | Kinanee | d0b941ea-1efd-365e-a4fb-4c9de7396848 | 3839992222
(1 rows)
```

10. Drop a table and Drop keyspace (4)

Drop table: the only table in sample_keyspace1 'user_info' was dropped, so there are no tables

```
[cqlsh:sample_keyspace1> drop table sample_keyspace1.user_info;
[cqlsh:sample_keyspace1> describe tables;

<empty>

cqlsh:sample_keyspace1> █
```

Drop keyspace: sample_keyspace1 no longer appears in list of keyspaces

```
[cqlsh:sample_keyspace1> drop keyspace sample_keyspace1;
[cqlsh:sample_keyspace1> describe keyspaces;

sample_keyspace  system_auth  system_distributed
system_schema    system       system_traces
```