

BDA

Practical 8

Cassandra

21BCE020

Setup Cassandra environment in your system and apply Create, Update, Read and Delete operations.

```
Connected as 21bce020@nirmauni.ac.in.
Connected to cndb at cassandra.ingress:9042.
[cqlsh 6.8.0 | Cassandra 4.0.0.6816 | CQL spec 3.4.5 | Native protocol v4 | TLS]
Use HELP for help.
token@cqlsh> desc keyspaces;

default_keyspace  data_endpoint_auth  system_traces
system_auth       system               system_views
system_schema     datastax_sla        system_virtual_schema

token@cqlsh> use default_keyspace
***
token@cqlsh:default_keyspace> desc tables;

restaurants
```

```
token@cqlsh:default_keyspace> CREATE TABLE IF NOT EXISTS res_details (
...     restaurant_id text PRIMARY KEY,
...     name text,
...     borough text,
...     cuisine text,
...     address text
... );
token@cqlsh:default_keyspace> desc tables;

res_details

token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30075445', 'Morris Park Bake Shop', 'Bronx', 'Bakery', 'Morris Park Ave, 10462');
token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy's', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225');
... INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30191841', 'Dj Reynolds Pub And Restaurant', 'Manhattan', 'Irish', 'West 57 Street, 10019');
... ;
... select * from res_details;
...
token@cqlsh:default_keyspace> select * from res_details;

restaurant_id | address | borough | cuisine | name
-----
30075445 | Morris Park Ave, 10462 | Bronx | Bakery | Morris Park Bake Shop

(1 rows)

token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy's', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225');
... INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy's', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225')
Invalid syntax at char 106
INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy's', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225')
token@cqlsh:default_keyspace>
token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225');
token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30191841', 'Dj Reynolds Pub And Restaurant', 'Manhattan', 'Irish', 'West 57 Street, 10019');
token@cqlsh:default_keyspace> select * from res_details;

restaurant_id | address | borough | cuisine | name
-----
30112340 | Flatbush Avenue, 11225 | Brooklyn | Hamburgers | Wendy
30075445 | Morris Park Ave, 10462 | Bronx | Bakery | Morris Park Bake Shop
30191841 | West 57 Street, 10019 | Manhattan | Irish | Dj Reynolds Pub And Restaurant

(3 rows)

token@cqlsh:default_keyspace> SELECT restaurant_id, name, borough, cuisine FROM res_details;

restaurant_id | name | borough | cuisine
-----
30112340 | Wendy | Brooklyn | Hamburgers
30075445 | Morris Park Bake Shop | Bronx | Bakery
30191841 | Dj Reynolds Pub And Restaurant | Manhattan | Irish
```

```
token@cqlsh:default_keyspace>
token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30112340', 'Wendy', 'Brooklyn', 'Hamburgers', 'Flatbush Avenue, 11225');
token@cqlsh:default_keyspace> INSERT INTO res_details (restaurant_id, name, borough, cuisine, address) VALUES ('30191841', 'Dj Reynolds Pub And Restaurant', 'Manhattan', 'Irish', 'West 57 Street, 10019');
token@cqlsh:default_keyspace> select * from res_details;

restaurant_id | address | borough | cuisine | name
-----
30112340 | Flatbush Avenue, 11225 | Brooklyn | Hamburgers | Wendy
30075445 | Morris Park Ave, 10462 | Bronx | Bakery | Morris Park Bake Shop
30191841 | West 57 Street, 10019 | Manhattan | Irish | Dj Reynolds Pub And Restaurant

(3 rows)

token@cqlsh:default_keyspace> SELECT restaurant_id, name, borough, cuisine FROM res_details;

restaurant_id | name | borough | cuisine
-----
30112340 | Wendy | Brooklyn | Hamburgers
30075445 | Morris Park Bake Shop | Bronx | Bakery
30191841 | Dj Reynolds Pub And Restaurant | Manhattan | Irish

(3 rows)

token@cqlsh:default_keyspace> SELECT * FROM res_details WHERE borough = 'Manhattan';
InvalidRequest: Error from server: code=2200 [Invalid query] message="Cannot execute this query as it might involve data filtering and thus may have unpredictable performance. If you want to execute this query despite the performance unpredictability, use ALLOW FILTERING"
token@cqlsh:default_keyspace> CREATE INDEX ON res_details (borough);
token@cqlsh:default_keyspace> SELECT * FROM res_details WHERE borough = 'Manhattan';

restaurant_id | address | borough | cuisine | name
-----
30191841 | West 57 Street, 10019 | Manhattan | Irish | Dj Reynolds Pub And Restaurant

(1 rows)

token@cqlsh:default_keyspace>
token@cqlsh:default_keyspace> SELECT * FROM res_details WHERE cuisine = 'Bakery';
InvalidRequest: Error from server: code=2200 [Invalid query] message="Cannot execute this query as it might involve data filtering and thus may have unpredictable performance. If you want to execute this query despite the performance unpredictability, use ALLOW FILTERING"
token@cqlsh:default_keyspace> SELECT * FROM res_details WHERE cuisine = 'Bakery' ALLOW FILTERING;

restaurant_id | address | borough | cuisine | name
-----
30075445 | Morris Park Ave, 10462 | Bronx | Bakery | Morris Park Bake Shop

(1 rows)

token@cqlsh:default_keyspace>
```