Practical-9

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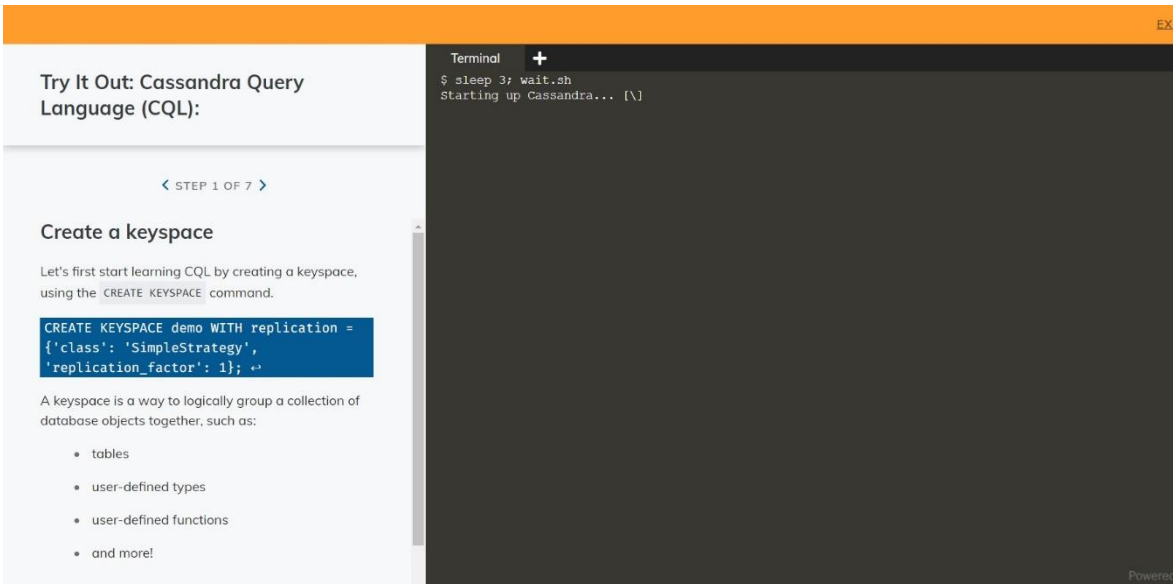
Couse Name : Big Data Analytics

Aim:

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

Setting up Environment:



Setting Up Key Spaces:

```
Your Interactive Bash Terminal.
$ cqlsh
Connected to Cassandra Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 4.0-beta4 | CQL spec 3.4.5 | Native protocol v4]
Use HELP for help.
cqlsh>
cqlsh>
cqlsh> CREATE KEYSPACE demo WITH replication = {'class': 'SimpleStrategy', 'replication_factor': 1};
cqlsh> describe keyspaces

demo    system_auth         system_schema  system_views
system  system_distributed  system_traces  system_virtual_schema

cqlsh>
```

The command is used to describe all the key spaces in the Cassandra cluster. Cassandra automatically creates key spaces that have names starting with system and uses these as the data dictionary for the cluster.

Creating Tables and Inserting Data:

```
cqlsh> CREATE TABLE demo.users (lastname text PRIMARY KEY, firstname text, email text);
cqlsh> use demo
   ...
cqlsh> INSERT INTO users (lastname, firstname, email) VALUES ('Round', 'Craig', 'craig@example.com');
InvalidRequest: Error from server: code=2200 [Invalid query] message="No keyspace has been specified. USE a keysp
ace, or explicitly specify keyspace.tablename"
cqlsh> USE demo;
cqlsh:demo> INSERT INTO users (lastname, firstname, email) VALUES ('Round', 'Craig', 'craig@example.com');
cqlsh:demo> INSERT INTO users (lastname, firstname, email) VALUES ('Polson', 'Lino', 'lino@example.com');
cqlsh:demo> INSERT INTO users (lastname, firstname, email) VALUES ('Pratico', 'Cassi', 'cassi@example.com');
cqlsh:demo>
```

View Table Data:

```
cqlsh:demo> SELECT * FROM users;

 lastname | email              | firstname
----------+--------------------+-----------
   Polson |  lino@example.com |      Lino
  Pratico | cassi@example.com |     Cassi
    Round | craig@example.com |     Craig

(3 rows)
```

View Table Data:

```
cqlsh:demo> SELECT * FROM users WHERE lastname = 'Pols

 lastname | email              | firstname
----------+--------------------+-----------
   Polson | lino@example.com |      Lino
```

Update Data:

```
cqlsh:demo> UPDATE users SET email ='jk@example.com'  WHERE lastname = 'Polson';
cqlsh:demo> SELECT * FROM users;

 lastname | email              | firstname
----------+--------------------+-----------
   Polson |    jk@example.com |      Lino
  Pratico | cassi@example.com |     Cassi
    Round | craig@example.com |     Craig

(3 rows)
```

Delete Data and View Changes:

```
cqlsh:demo> DELETE FROM users WHERE lastname='Polson';
cqlsh:demo> SELECT * FROM users;

 lastname | email              | firstname
----------+--------------------+-----------
  Pratico | cassi@example.com |     Cassi
    Round | craig@example.com |     Craig
```