cqlsh is a command-line interface for interacting with Cassandra using CQL (the Cassandra Query Language). It is shipped with every Cassandra package, and can be found in the bin/ directory alongside the cassandra executable.

What is a Keyspace in Cassandra? A keyspace is **a data container in Cassandra, similar to a database in relational database management systems (RDMBS)**.

Practical 1

cqlsh>

cqlsh> CREATE KEYSPACE demo WITH replication = {'class': 'SimpleStrategy', 'replication\_factor': 1};

cqlsh> CREATE KEYSPACE key WITH replication = {'class': 'SimpleStrategy', 'replication\_factor': 3};

cqlsh> DESCRIBE key;

CREATE KEYSPACE key WITH replication = {'class': 'SimpleStrategy', 'replication\_factor': '3'} AND durable\_writes = true;

Writes in Cassandra are durable. All writes to a replica node are recorded both in memory and in a commit log on disk before they are acknowledged as a success. If a crash or server failure occurs before the memtables are flushed to disk, the commit log is replayed on restart to recover any lost writes.

cqlsh> use key ;

cqlsh:key> CREATE TABLE emp (emp\_id int PRIMARY KEY ,emp\_city text ,emp\_name text,emp\_sal varint);

cqlsh:key> select \* from emp;

emp\_id | emp\_city | emp\_name | emp\_sal

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(0 rows)

cqlsh:key> INSERT INTO emp (emp\_id,emp\_city ,emp\_name ,emp\_sal) VALUES (1,'Nagpur','Meghna',790000);

cqlsh:key>

cqlsh:key> INSERT INTO emp (emp\_id,emp\_city ,emp\_name ,emp\_sal) VALUES (2,'Nagpur','Dr.Sameer',1790000);

cqlsh:key> INSERT INTO emp (emp\_id,emp\_city ,emp\_name ,emp\_sal) VALUES (3,'Nagpur','Dinesh',10000);

cqlsh:key> select \* from emp

... ;

emp\_id | emp\_city | emp\_name | emp\_sal

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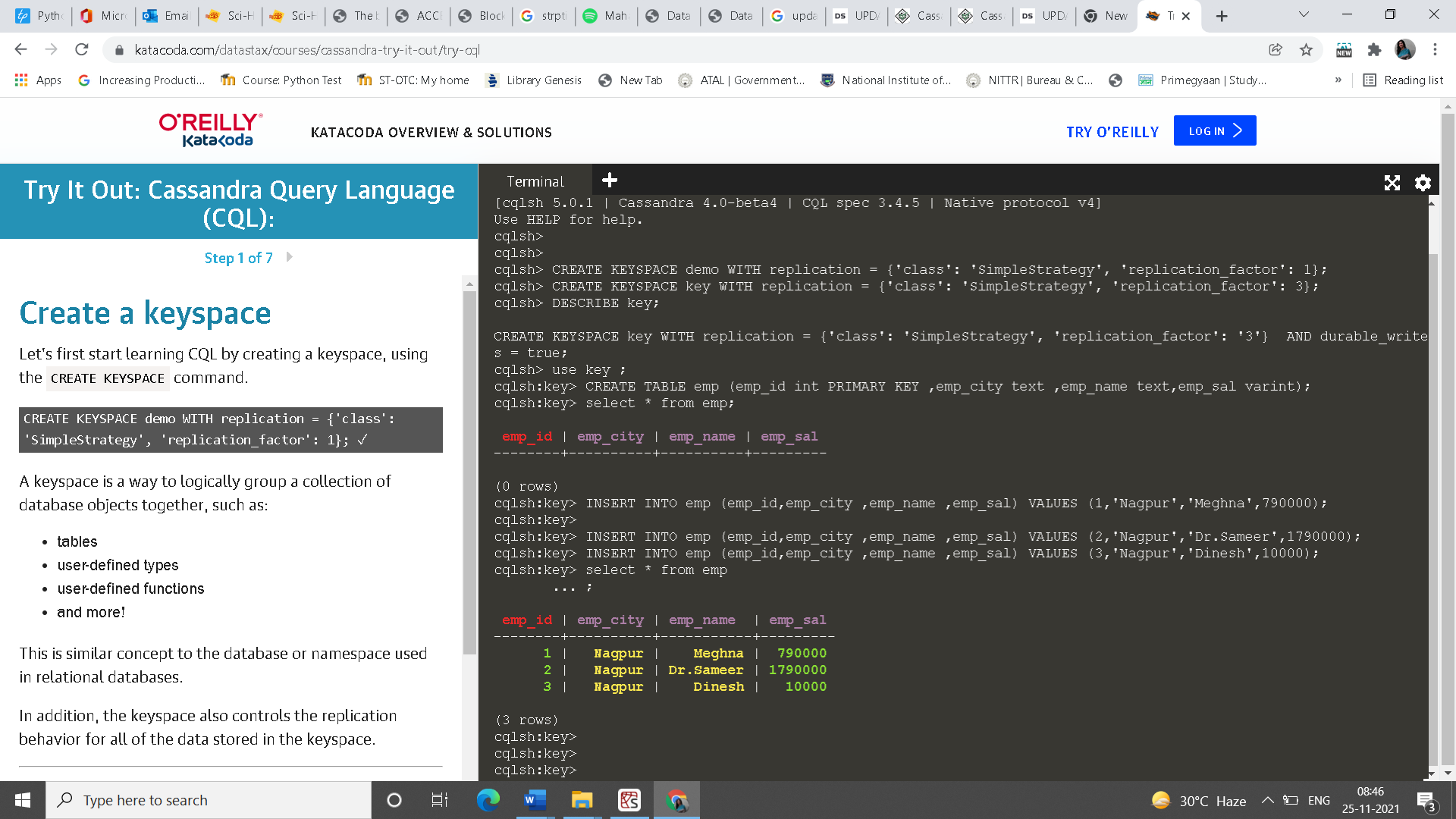
1 | Nagpur | Meghna | 790000

2 | Nagpur | Dr.Sameer | 1790000

3 | Nagpur | Dinesh | 10000

(3 rows)

cqlsh:key>



UPDATE emp set emp\_city='Delhi' , emp\_sal=20000 where emp\_id=3;

cqlsh:key> select \* from emp ;

emp\_id | emp\_city | emp\_name | emp\_sal

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1 | Nagpur | Meghna | 790000

2 | Nagpur | Dr.Sameer | 1790000

3 | Delhi | Dinesh | 20000

(3 rows)

cqlsh:key> DELETE from emp where emp\_id=3;

cqlsh:key> select \* from emp ;

emp\_id | emp\_city | emp\_name | emp\_sal

--------+----------+-----------+---------

1 | Nagpur | Meghna | 790000

2 | Nagpur | Dr.Sameer | 1790000

(2 rows)

cqlsh:key> DROP table emp;

The DROP command is used to remove table definition and its contents. Whereas the **TRUNCATE command is used to delete all the rows from the table**.