

- 1.Command to create Keyspace:
- 2.Command to describe the existing Keyspaces:

```
rutazeet@rutazeet-VirtualBox:~$ cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.9 | CQL spec 3.4.2 | Native protocol v4]
Use HELP for help.
cqlsh> CREATE KEYSPACE students WITH REPLICATION={'class':'SimpleStrategy','replication_factor':1};
cqlsh> DESCRIBE KEYSPACES;

students  system_schema  system_auth  system  system_distributed  system_traces
```

- 3.Command to use keyspace students:
- 4.Command to create a column family or table
- 5.Command to look up the names of all tables in current keyspace, or in all keyspace if there is no current space:
- 6.Command to describe the table

```
cqlsh> USE students;
cqlsh:students> create table Student_Info(RollNo int PRIMARY KEY,StudName text,DateofJoining timestamp,LastExamPercent double);
cqlsh:students> DESCRIBE TABLES;

student_info

cqlsh:students> DESCRIBE TABLE student_info;

CREATE TABLE students.student_info (
  rollno int PRIMARY KEY,
  dateofjoining timestamp,
  lastexampercent double,
  studname text
) WITH bloom_filter_fp_chance = 0.01
   AND caching = {'keys': 'ALL', 'rows_per_partition': 'NONE'}
   AND comment = ''
   AND compaction = {'class': 'org.apache.cassandra.db.compaction.SizeTieredCompactionStrategy', 'max_threshold': '32', 'min_threshold': '4'}
   AND compression = {'chunk_length_in_kb': '64', 'class': 'org.apache.cassandra.io.compress.LZ4Compressor'}
   AND crc_check_chance = 1.0
   AND dclocal_read_repair_chance = 0.1
   AND default_time_to_live = 0
   AND gc_grace_seconds = 864000
   AND max_index_interval = 2048
   AND memtable_flush_period_in_ms = 0
   AND min_index_interval = 128
   AND read_repair_chance = 0.0
   AND speculative_retry = '99PERCENTILE';
```

CRUD Operations

- 1.To insert data into the column family
- 2.To view the data from the table "Student_Info".

```
cqlsh:students> BEGIN BATCH INSERT INTO student_info(RollNo,StudName,DateofJoining,LastExamPercent) VALUES (1,'Michael Storm','2012-03-29', 69.6)INSERT INTO student_info (RollNo,StudName,DateofJoining,LastExamPercent) VALUES (2,'Stephen Fox','2013-02-27', 72.5)APPLY BATCH;
cqlsh:students> SELECT *FROM Student_Info;
```

rollno	dateofjoining	lastexampercent	studname
1	2012-03-28 18:30:00.000000+0000	69.6	Michael Storm
2	2013-02-26 18:30:00.000000+0000	72.5	Stephen Fox

(2 rows)

- 3.To update the value
- 4.To view only those records present in the column

```
cqlsh:students> SELECT * FROM Student_Info WHERE RollNo in (1,2);
```

rollno	dateofjoining	lastexampercent	studname
1	2012-03-28 18:30:00.000000+0000	69.6	Michael Storm
2	2013-02-26 18:30:00.000000+0000	72.5	David Sheen

(2 rows)

```
cqlsh:students> CREATE INDEX ON Student_Info(studname);
```

- 5.To create an index on the "studname" column of the "student_info"column family use the following statement.

- 6.To execute the query using the index defined on "studname" column.

- 7.To create index on the "LastExamPercent" column of the "Student_Info"column family.

- 8.To specify the number of rows returned in the output using limit.

```
cqlsh:students> SELECT * FROM student_info WHERE studName='Stephen Fox' ;
```

rollno	dateofjoining	lastexampercent	studname
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(0 rows)

```
cqlsh:students> CREATE INDEX ON Student_Info(LastExamPercent);
```

```
cqlsh:students> SELECT RollNo, LastExamPercent FROM Student_info LIMIT 2;
```

rollno	lastexampercent
1	69.6
2	72.5

(2 rows)

- 9.To use column alias for the column 'StudName'in the Student_Info table.

```
cqlsh:students> SELECT RollNo, StudName AS "Name" FROM Student_Info;
```

rollno	Name
1	Michael Storm
2	David Sheen

(2 rows)

10.To update more than one column of a row of Cassandra table.

```
cqlsh:students> SELECT * FROM Student_Info where RollNo=2;
```

rollno	dateofjoining	lastexampercent	studname
2	2013-02-26 18:30:00.000000+0000	85.7	Samaira

(1 rows)

11.To delete the column “LastExamPercent” from the “student_info” table forthe record where the RollNo = 2.

```
cqlsh:students> DELETE LastExamPercent FROM Student_Info WHERE RollNo=2;
cqlsh:students> SELECT *FROMStudentInfo where RollNo=2;
SyntaxException: line 1:8 missing K_FROM at 'FROMStudentInfo' (SELECT *[FROMStudentInfo] where...)
cqlsh:students> SELECT *FROM Student_Info where RollNo=2;
```

rollno	dateofjoining	lastexampercent	studname
2	2013-02-26 18:30:00.000000+0000	null	Samaira

(1 rows)

12.To delete a row from the table Student_Info.

```
cqlsh:students> DELETE FROM Student_Info WHERE RollNo=1;
cqlsh:students> SELECT * FROM Student_Info where RollNo=1;
```

rollno	dateofjoining	lastexampercent	studname
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(0 rows)