**Week-2-Cassandra**

bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC:~$ cqlsh

Connected to Test Cluster at 127.0.0.1:9042

[cqlsh 6.1.0 | Cassandra 4.1.4 | CQL spec 3.4.6 | Native protocol v5]

Use HELP for help.

cqlsh> CREATE KEYSPACE Students WITH REPLICATION={

... 'class':'SimpleStrategy','replication\_factor':1};

cqlsh> DESCRIBE KEYSPACES

students system\_auth system\_schema system\_views

system system\_distributed system\_traces system\_virtual\_schema

cqlsh> SELECT \* FROM system.schema\_keyspaces;

InvalidRequest: Error from server: code=2200 [Invalid query] message="table schema\_keyspaces does not exist"

cqlsh> use Students;

cqlsh:students> create table Students\_info(Roll\_No int Primary key,StudName text,DateOfJoining timestamp,last\_exam\_Percent double);

cqlsh:students> describe tables;

students\_info

cqlsh:students> describe table students;

Table 'students' not found in keyspace 'students'

cqlsh:students> describe table students\_info;

CREATE TABLE students.students\_info (

roll\_no int PRIMARY KEY,

dateofjoining timestamp,

last\_exam\_percent double,

studname text

) WITH additional\_write\_policy = '99p'

AND bloom\_filter\_fp\_chance = 0.01

AND caching = {'keys': 'ALL', 'rows\_per\_partition': 'NONE'}

AND cdc = false

AND comment = ''

AND compaction = {'class': 'org.apache.cassandra.db.compaction.SizeTieredCompactionStrategy', 'max\_threshold': '32', 'min\_threshold': '4'}

AND compression = {'chunk\_length\_in\_kb': '16', 'class': 'org.apache.cassandra.io.compress.LZ4Compressor'}

AND memtable = 'default'

AND crc\_check\_chance = 1.0

AND default\_time\_to\_live = 0

AND extensions = {}

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 = 'BLOCKING'

AND speculative\_retry = '99p';

cqlsh:students> Begin batch insert into Students\_info(Roll\_no, StudName,DateOfJoining, last\_exam\_Percent) values(1,'Sadhana','2023-10-09', 98)

insert into Students\_info(Roll\_no, StudName,DateOfJoining, last\_exam\_Percent) values(2,'Rutu','2023-10-10', 97)

insert into Students\_info(Roll\_no, StudName,DateOfJoining, last\_exam\_Percent) values(3,'Rachana','2023-10-10', 97.5)

insert into Students\_info(Roll\_no, StudName,DateOfJoining, last\_exam\_Percent) values(4,'Charu','2023-10-06', 96.5) apply batch;

cqlsh:students> select \* from students\_info;

roll\_no | dateofjoining | last\_exam\_percent | studname

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1 | 2023-10-08 18:30:00.000000+0000 | 98 | Sadhana

2 | 2023-10-09 18:30:00.000000+0000 | 97 | Rutu

4 | 2023-10-05 18:30:00.000000+0000 | 96.5 | Charu

3 | 2023-10-09 18:30:00.000000+0000 | 97.5 | Rachana

(4 rows)

cqlsh:students> select \* from students\_info where roll\_no in (1,2,3);

roll\_no | dateofjoining | last\_exam\_percent | studname

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

1 | 2023-10-08 18:30:00.000000+0000 | 98 | Sadhana

2 | 2023-10-09 18:30:00.000000+0000 | 97 | Rutu

3 | 2023-10-09 18:30:00.000000+0000 | 97.5 | Rachana

cqlsh:students> select \* from students\_info where Studname='Charu';

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"

cqlsh:students> create index on Students\_info(StudName);

cqlsh:students> select \* from students\_info where Studname='Charu';

roll\_no | dateofjoining | last\_exam\_percent | studname

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

4 | 2023-10-05 18:30:00.000000+0000 | 96.5 | Charu

(1 rows)

cqlsh:students> select Roll\_no,StudName from students\_info LIMIT 2;

roll\_no | studname

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

1 | Sadhana

2 | Rutu

(2 rows)

cqlsh:students> SELECT Roll\_no as "USN" from Students\_info;

USN

-----

1

2

4

3

(4 rows)

cqlsh:students> update students\_info set StudName='Shreya' where Roll\_no=3;

cqlsh:students> select \* from students\_info;

roll\_no | dateofjoining | last\_exam\_percent | studname

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

1 | 2023-10-08 18:30:00.000000+0000 | 98 | Sadhana

2 | 2023-10-09 18:30:00.000000+0000 | 97 | Rutu

4 | 2023-10-05 18:30:00.000000+0000 | 96.5 | Charu

3 | 2023-10-09 18:30:00.000000+0000 | 97.5 | Shreya

(4 rows)

cqlsh:students> update students\_info set roll\_no=8 where Roll\_no=3;

InvalidRequest: Error from server: code=2200 [Invalid query] message="PRIMARY KEY part roll\_no found in SET part"

cqlsh:students> delete last\_exam\_percent from students\_info where roll\_no=2;

cqlsh:students> select \* from students\_info;

roll\_no | dateofjoining | last\_exam\_percent | studname

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

1 | 2023-10-08 18:30:00.000000+0000 | 98 | Sadhana

2 | 2023-10-09 18:30:00.000000+0000 | null | Rutu

4 | 2023-10-05 18:30:00.000000+0000 | 96.5 | Charu

3 | 2023-10-09 18:30:00.000000+0000 | 97.5 | Shreya

(4 rows)

cqlsh:students> delete from students\_info where roll\_no=2;

cqlsh:students> select \* from students\_info;

roll\_no | dateofjoining | last\_exam\_percent | studname

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

1 | 2023-10-08 18:30:00.000000+0000 | 98 | Sadhana

4 | 2023-10-05 18:30:00.000000+0000 | 96.5 | Charu

3 | 2023-10-09 18:30:00.000000+0000 | 97.5 | Shreya

(3 rows)

**Employee Database**





