

## LABORATORY PROGRAM – 4

### Execution of HDFS Commands

#### OBSERVATION

```
bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
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','repl  
ication_factor':1};  
AlreadyExists: Keyspace 'students' already exists  
cqlsh>  
cqlsh> CREATE KEYSPACE Student WITH REPLICATION={'class':'SimpleStrategy','repl  
ication_factor':1};  
cqlsh> DESCRIBE KEYSPACES;  
  
business  students      system_distributed  system_views  
persons   system         system_schema       system_virtual_schema  
student   system_auth    system_traces
```

```
bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:students>  
cqlsh:students>  
cqlsh:students> USE Student;  
cqlsh:student> CREATE TABLE Students_Info(Roll_No int PRIMARY KEY, StudName text  
, DateOfJoining timestamp, last_exam_Percent double);  
cqlsh:student> DESCRIBE TABLES;  
  
students_info
```

```
bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
...  
cqlsh:student> SELECT * FROM Students_Info;  
  
roll_no | dateofjoining | last_exam_percent | studname  
-----+-----+-----+-----
```

```
bmscse@bmscse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
(1 rows)  
cqlsh:student> BEGIN BATCH  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (1,'Asha','2012-03-12',79.9)  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (2,'Krian','2012-03-12',89.9)  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (3,'Tarun','2012-03-12',78.9)  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (4,'Samrth','2012-03-12',90.9)  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (5,'Smitha','2012-03-12',67.9)  
    ... INSERT INTO Students_Info(Roll_No, StudName,DateOfJoining, last_e  
xam_Percent) VALUES (1,'Rohan','2012-03-12',56.9)  
    ... APPLY BATCH;  
cqlsh:student> SELECT * FROM Students_Info;  
  
roll_no | dateofjoining | last_exam_percent | studname  
-----+-----+-----+-----  
5 | 2012-03-11 18:30:00.000000+0000 | 67.9 | Smitha  
1 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Rohan  
2 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian  
4 | 2012-03-11 18:30:00.000000+0000 | 90.9 | Samrth  
3 | 2012-03-11 18:30:00.000000+0000 | 78.9 | Tarun  
  
(5 rows)  
cqlsh:student> 
```

```
bmscse@bmscse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> SELECT * FROM Students_Info WHERE Roll_No IN (1,2,3);  
  
roll_no | dateofjoining | last_exam_percent | studname  
-----+-----+-----+-----  
1 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Rohan  
2 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian  
3 | 2012-03-11 18:30:00.000000+0000 | 78.9 | Tarun  
  
(3 rows)  
cqlsh:student> SELECT * FROM Students_Info WHERE StudName='Tarun';  
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:student> CREATE INDEX ON Students_Info (StudName);  
cqlsh:student> SELECT * FROM Students_Info where StudName='Tarun';  
  
roll_no | dateofjoining | last_exam_percent | studname  
-----+-----+-----+-----  
3 | 2012-03-11 18:30:00.000000+0000 | 78.9 | Tarun  
  
(1 rows)  
cqlsh:student> SELECT Roll_No,StudName from Students_Info LIMIT 2;  
  
roll_no | studname  
-----+-----  
5 | Smitha  
1 | Rohan  
  
(2 rows)  
cqlsh:student> 
```

```
bmscse@bmscse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> SELECT Roll_No as "USN" from Students_Info;  
  
USN  
----  
5  
1  
2  
4  
3  
  
(5 rows)  
cqlsh:student> UPDATE Students_Info SET StudName='David Sheen' WHERE Roll_No=2;  
cqlsh:student> UPDATE Students_Info SET Roll_No=6 WHERE Roll_No=3;  
InvalidRequest: Error from server: code=2200 [Invalid query] message="PRIMARY KEY part roll_no found in SET part"
```

```
bmscsece@bmscsece-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> DELETE last_exam_Percent FROM Students_Info WHERE Roll_No=1;  
cqlsh:student> DELETE FROM Students_Info WHERE Roll_No=2;  
cqlsh:student> ALTER TABLE Students_Info ADD hobbies set<text>;  
cqlsh:student> ALTER TABLE Students_Info ADD language list<text>;  
cqlsh:student> UPDATE Students_Info SET hobbies=hobbies+{'Chess,Table Tennis'} W  
HERE Roll_No=3;  
cqlsh:student> SELECT * FROM Students_Info WHERE Roll_No=3;  
  
roll_no | dateofjoining | hobbies | language |  
last_exam_percent | studname  
-----+-----  
3 | 2012-03-11 18:30:00.000000+0000 | {'Chess,Table Tennis'} | null |  
78.9 | Tarun  
  
(1 rows)  
cqlsh:student> UPDATE Students_Info SET language=language+['Hindi,English'] WHER  
E Roll_No=3;  
cqlsh:student> SELECT * FROM Students_Info WHERE Roll_No=3;  
  
roll_no | dateofjoining | hobbies | language  
| last_exam_percent | studname  
-----+-----  
3 | 2012-03-11 18:30:00.000000+0000 | {'Chess,Table Tennis'} | ['Hindi,En  
glish'] |  
78.9 | Tarun  
  
(1 rows)  
cqlsh:student> 
```

```
bmscsece@bmscsece-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> CREATE TABLE library_book(counter_value counter,book_name varchar  
,stud_name varchar,PRIMARY KEY(book_name,stud_name));  
cqlsh:student> UPDATE library_book SET counter_value=counter_value+1 WHERE book_  
name='Big Data Analytics' AND stud_name='jeet';  
cqlsh:student> CREATE TABLE userlogin(userid int PRIMARY KEY, password text);  
INCqlsh:student> INSERT INTO userlogin(userid,password) VALUES (1,'infy') USING  
TTL 30;  
SyntaxException: line 1:63 no viable alternative at input 'T' (...VALUES (1,'inf  
y') USING [T]...)  
cqlsh:student> INSERT INTO userlogin(userid,password) VALUES (1,'infy') USING TT  
L 30;  
cqlsh:student> SELECT TTL(password) FROM userlogin WHERE userid=1;  
  
ttl(password)  
-----  
  
(0 rows)  
cqlsh:student> 
```

```
bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> COPY Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent) TO 'd:\elearninglists.csv';  
Using 16 child processes  
  
Starting copy of student.students_info with columns [roll_no, studname, dateofjoining, last_exam_percent].  
Processed: 4 rows; Rate: 71 rows/s; Avg. rate: 71 rows/s  
4 rows exported to 1 files in 0.067 seconds.  
cqlsh:student> COPY Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent) FROM 'd:\elearninglists.csv';  
Using 16 child processes  
  
Starting copy of student.students_info with columns [roll_no, studname, dateofjoining, last_exam_percent].  
Processed: 4 rows; Rate: 8 rows/s; Avg. rate: 11 rows/s  
4 rows imported from 1 files in 0.358 seconds (0 skipped).
```

```
bmscecse@bmscecse-HP-Elite-Tower-800-G9-Desktop-PC: ~  
cqlsh:student> COPY userlogin(userid, password) FROM STDIN;  
Using 16 child processes  
  
Starting copy of student.userlogin with columns [userid, password].  
[Use . on a line by itself to end input]  
[copy] 2, 'ijkl'  
[copy] .  
  
Processed: 1 rows; Rate: 0 rows/s; Avg. rate: 0 rows/s  
1 rows imported from 1 files in 0 day, 0 hour, 0 minute, and 24.302 seconds (0 skipped).  
cqlsh:student> COPY userlogin(userid, password) TO STDOUT;  
2, 'ijkl'  
cqlsh:student> █
```