

LAB 02- OUTPUT

SARVESHMURTHY A
1BM18CS144

```
bmsce@bmsce-Precision-T1700:~$ cd cassandra/apache-cassandra-3.11.0/bin
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0/bin$ ./cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> DESCRIBE KEYSPACES;

system_schema  system      system_distributed  system_traces
system_auth    student    employee

cqlsh> CREATE KEYSPACE students WITH REPLICATION={'class':'SimpleStrategy','replication_factor':1};
cqlsh> DESCRIBE KEYSPACES;

students      system_auth  student      employee
system_schema system      system_distributed  system_traces

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_info;

CREATE TABLE students.students_info (
  roll_no int PRIMARY KEY,
  dateofjoining timestamp,
  last_exam_percent 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';
```

```
cqlsh:students> BEGIN BATCH INSERT INTO students_info(Roll_No, StudName, DateOfJoining, last_exam_Percent) VALUES(1,'John','2021-03-25',89.98) INSERT INTO students_info(Roll_No, StudName, DateOfJoining, last_exam_Percent) VALUES(2,'JohnDoe','2021-01-25',97.98) INSERT INTO students_info(Roll_No, StudName, DateOfJoining, last_exam_Percent) VALUES(2,'Smith','2021-01-07',76.98) INSERT INTO students_info(Roll_No, StudName, DateOfJoining, last_exam_Percent) VALUES(4,'Smith','2021-01-06',64.86)APPLY BATCH;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	John
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
4	2021-01-05 18:30:00.000000+0000	64.86	Smith

(3 rows)

```
cqlsh:students> INSERT INTO students_info(Roll_No, StudName, DateOfJoining, last_exam_Percent) VALUES(3,'Iyer','2021-01-07',76.98)
... ;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	John
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
4	2021-01-05 18:30:00.000000+0000	64.86	Smith
3	2021-01-06 18:30:00.000000+0000	76.98	Iyer

(4 rows)

```
cqlsh:students> UPDATE TABLE Students_info SET studname='John Doe' WHERE Roll_No = 4;
SyntaxException: line 1:7 no viable alternative at input 'TABLE' (UPDATE [TABLE]...)
cqlsh:students> UPDATE Students_info SET studname='John Doe' WHERE Roll_No = 4;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	John
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
4	2021-01-05 18:30:00.000000+0000	64.86	John Doe
3	2021-01-06 18:30:00.000000+0000	76.98	Iyer

(4 rows)

```
cqlsh:students>
?      CAPTURE  CONSISTENCY  DEBUG      DESCRIBE   GRANT      LIST      REVOKE     SHOW      TRUNCATE   exit
ALTER  CLEAR      COPY        DELETE     DROP      HELP      LOGIN     SELECT     SOURCE    UPDATE    quit
BEGIN  CLS        CREATE      DESC       EXPAND     INSERT     PAGING    SERIAL     TRACING   USE
cqlsh:students> SELECT Roll_No as "USN" from Students_info;
```

```

cqlsh:students> SELECT Roll_No as "USN" from Students_info;

USN
----
 1
 2
 4
 3

(4 rows)
cqlsh:students> ?

Documented shell commands:
=====
CAPTURE CLS COPY DESCRIBE EXPAND LOGIN SERIAL SOURCE UNICODE
CLEAR CONSISTENCY DESC EXIT HELP PAGING SHOW TRACING

CQL help topics:
=====
AGGREGATES CREATE_KEYSPACE DROP_TRIGGER TEXT
ALTER_KEYSPACE CREATE_MATERIALIZED_VIEW DROP_TYPE TIME
ALTER_MATERIALIZED_VIEW CREATE_ROLE DROP_USER TIMESTAMP
ALTER_TABLE CREATE_TABLE FUNCTIONS TRUNCATE
ALTER_TYPE CREATE_TRIGGER GRANT TYPES
ALTER_USER CREATE_TYPE INSERT UPDATE
APPLY CREATE_USER INSERT_JSON USE
ASCII DATE INT UUID
BATCH DELETE JSON
BEGIN DROP_AGGREGATE KEYWORDS
BLOB DROP_COLUMNFAMILY LIST_PERMISSIONS
BOOLEAN DROP_FUNCTION LIST_ROLES
COUNTER DROP_INDEX LIST_USERS
CREATE_AGGREGATE DROP_KEYSPACE PERMISSIONS
CREATE_COLUMNFAMILY DROP_MATERIALIZED_VIEW REVOKE
CREATE_FUNCTION DROP_ROLE SELECT
CREATE_INDEX DROP_TABLE SELECT_JSON

cqlsh:students> SELECT * FROM students_info WHERE Roll_No in (1,2,4);

roll_no | dateofjoining | last_exam_percent | studname
-----|-----|-----|-----
 1 | 2021-03-24 18:30:00.000000+0000 | 89.98 | John
 2 | 2021-01-24 18:30:00.000000+0000 | 97.98 | Smith
 4 | 2021-01-05 18:30:00.000000+0000 | 64.86 | John Doe

(3 rows)
InvalidRequest: error from server: code=2200 [invalid query] message= Some partition key parts are missing: roll_no
cqlsh:students> UPDATE students_info SET Studname = 'David' WHERE Roll_No = 1;
cqlsh:students> SELECT * FROM students_info;
cqlsh:students> SELECT Roll_No as "USN" from Students_info;

```

```

USN
----
 1
 2
 4
 3

(4 rows)
cqlsh:students> ?

```

```

Documented shell commands:
=====
CAPTURE CLS COPY DESCRIBE EXPAND LOGIN SERIAL SOURCE UNICODE
CLEAR CONSISTENCY DESC EXIT HELP PAGING SHOW TRACING

CQL help topics:
=====
AGGREGATES CREATE_KEYSPACE DROP_TRIGGER TEXT
ALTER_KEYSPACE CREATE_MATERIALIZED_VIEW DROP_TYPE TIME
ALTER_MATERIALIZED_VIEW CREATE_ROLE DROP_USER TIMESTAMP
ALTER_TABLE CREATE_TABLE FUNCTIONS TRUNCATE
ALTER_TYPE CREATE_TRIGGER GRANT TYPES
ALTER_USER CREATE_TYPE INSERT UPDATE
APPLY CREATE_USER INSERT_JSON USE
ASCII DATE INT UUID
BATCH DELETE JSON
BEGIN DROP_AGGREGATE KEYWORDS
BLOB DROP_COLUMNFAMILY LIST_PERMISSIONS
BOOLEAN DROP_FUNCTION LIST_ROLES
COUNTER DROP_INDEX LIST_USERS
CREATE_AGGREGATE DROP_KEYSPACE PERMISSIONS
CREATE_COLUMNFAMILY DROP_MATERIALIZED_VIEW REVOKE
CREATE_FUNCTION DROP_ROLE SELECT
CREATE_INDEX DROP_TABLE SELECT_JSON

cqlsh:students> SELECT * FROM students_info WHERE Roll_No in (1,2,4);

roll_no | dateofjoining | last_exam_percent | studname
-----|-----|-----|-----
 1 | 2021-03-24 18:30:00.000000+0000 | 89.98 | John
 2 | 2021-01-24 18:30:00.000000+0000 | 97.98 | Smith
 4 | 2021-01-05 18:30:00.000000+0000 | 64.86 | John Doe

(3 rows)

```

```
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	David
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	76.98	Iyer

```
(3 rows)
cqlsh:students> DELETE last_exam_percent FROM students_info WHERE Roll_no = 3;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	David
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	null	Iyer

```
(3 rows)
cqlsh:students> UPDATE students_info SET last_exam_percent = 85.16 WHERE Roll_No = 3;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	89.98	David
2	2021-01-24 18:30:00.000000+0000	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	85.16	Iyer

```
(3 rows)
cqlsh:students> ALTER TABLE Students_info ADD hobbies set<text>;
cqlsh:students> DESCRIBE TABLE students_info;
```

```
CREATE TABLE students.students_info (
  roll_no int PRIMARY KEY,
  dateofjoining timestamp,
  hobbies set<text>,
  last_exam_percent 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
```

```
cqlsh:students> UPDATE students_info SET language+['Hindi,English'] WHERE Roll_no=1;
SyntaxException: line 1:33 no viable alternative at input '+' (UPDATE students_info SET language[+]....)
cqlsh:students> UPDATE students_info SET language=language+['Hindi,English'] WHERE Roll_no=1;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	hobbies	language	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	{'Chess,Cricket'}	['Hindi,English']	89.98	David
2	2021-01-24 18:30:00.000000+0000	{'Football,Reading'}	null	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	{'Hockey,Travelling'}	null	85.16	Iyer

```
(3 rows)
cqlsh:students> UPDATE students_info SET language=language+['Kannada,Marathi'] WHERE Roll_no=2;
cqlsh:students> UPDATE students_info SET language=language+['Kannada,English,French'] WHERE Roll_no=3;
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	hobbies	language	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	{'Chess,Cricket'}	['Hindi,English']	89.98	David
2	2021-01-24 18:30:00.000000+0000	{'Football,Reading'}	['Kannada,Marathi']	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	{'Hockey,Travelling'}	['Kannada,English,French']	85.16	Iyer

```
(3 rows)
cqlsh:students> CREATE TABLE library_book(counter_value counter, book_name varchar,stud_name varchar, PRIMARY KEY(book_name,stud_name));
cqlsh:students> DESCRIBE library_book;
```

```
CREATE TABLE students.library_book (
  book_name text,
  stud_name text,
  counter_value counter,
  PRIMARY KEY (book_name, stud_name)
) WITH CLUSTERING ORDER BY (stud_name ASC)
AND 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';
```

```
cqlsh:students> INSERT INTO library_book(counter_value, book_name, stud_name) VALUES(0, 'BDA','John');
InvalidRequest: Error from server: code=2200 [Invalid query] message="INSERT statements are not allowed on counter tables, use UPDATE instead"
cqlsh:students> UPDATE library_book SET counter_value=counter_value+1 WHERE book_name='BDA' AND stud_name='John';
cqlsh:students> SELECT * FROM library_book;
```

book_name	stud_name	counter_value
BDA	John	1

(1 rows)

```
cqlsh:students> CREATE TABLE userlogin(userid int PRIMARY KEY, password text);
cqlsh:students> DESCRIBE TABLE userlogin;
```

```
CREATE TABLE students.userlogin (
  userid int PRIMARY KEY,
  password 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';
```

```
cqlsh:students> INSERT INTO userlogin(userid, password) VALUES(1,'infi') USING TTL 30;
cqlsh:students> SELECT * FROM userlogin;
```

userid	password
1	infi

(1 rows)

```
cqlsh:students> SELECT TTL(password) FROM userlogin WHERE userid = 1;
```

ttn(password)

(0 rows)

```
cqlsh:students> INSERT INTO userlogin(userid, password) VALUES(1,'infi') USING TTL 30;
cqlsh:students> SELECT * FROM userlogin;
```

userid	password
1	infi

(1 rows)

```
cqlsh:students> SELECT TTL(password) FROM userlogin WHERE userid = 1;
```

ttn(password)

(0 rows)

```
cqlsh:students> SELECT * FROM userlogin;
```

userid	password
--------	----------

(0 rows)

```
cqlsh:students> SELECT * FROM students_info;
```

roll_no	dateofjoining	hobbies	language	last_exam_percent	studname
1	2021-03-24 18:30:00.000000+0000	{'Chess,Cricket'}	['Hindi,English']	89.98	David
2	2021-01-24 18:30:00.000000+0000	{'Football,Reading'}	['Kannada,Marathi']	97.98	Smith
3	2021-01-06 18:30:00.000000+0000	{'Hockey,Travelling'}	['Kannada,English,French']	85.16	Iyer

(3 rows)

CODE:

```
bmsce@bmsce-Precision-T1700:~$ cd cassandra/apache-cassandra-3.11.0/
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0$ cd bin
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0/bin$ ./cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> CREATE KEYSPACE Students1 WITH REPLICATION =
{'class': 'SimpleStrategy', 'replication_factor': 1};
cqlsh> DESCRIBE KEYSPACES
students system_auth students1 employee
system_schema system system_distributed system_traces
cqlsh:students> USE Students1;
cqlsh:students1> CREATE TABLE Students_Info(Roll_No int PRIMARY KEY, StudName text,
DateOfJoining timestamp, last_exam_Percent double);
cqlsh:students1> DESCRIBE TABLES;
students_info
cqlsh:students1> DESCRIBE TABLE Students_info;
CREATE TABLE students1.students_info (
roll_no int PRIMARY KEY,
dateofjoining timestamp,
last_exam_percent 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';

cqlsh:students1> BEGIN BATCH
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (1,'Tarun','2012-03-12',78.9)
... APPLY BATCH;
cqlsh:students1> SELECT* FROM Students_info;
```

```
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
```

```
1 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Tarun
```

(1 rows)

```
cqlsh:students1> BEGIN BATCH
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (2,'Asha','2012-03-12',79.9)
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (3,'Krian','2012-03-12',89.9)
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (4,'Samrth','2012-03-12',90.9)
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (5,'Smitha','2012-03-12',67.9)
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (6,'Rohan','2012-03-12',56.9)
```

```
... APPLY BATCH;
```

```
cqlsh:students1> 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 | 89.9 | Tarun
```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

```
4 | 2012-03-11 18:30:00.000000+0000 | 90.9 | Samrth
```

```
6 | 2012-03-11 18:30:00.000000+0000 | 56.9 | Rohan
```

```
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
```

(6 rows)

```
cqlsh:students1> 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 | 89.9 | Tarun
```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

```
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
```

(3 rows)

```
cqlsh:students1> select * from Students_info where Studname='Asha' ALLOW FILTERING;
```

```
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

(1 rows)

```
cqlsh:students1> CREATE INDEX ON Students_Info (StudName);
```

```
cqlsh:students1> select * from students_info where Studname='Asha';
```

```
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

(1 rows)

```
cqlsh:students1> select Roll_No, StudName from students_info LIMIT 2;
```

```
roll_no | studname
```

-----+-----

5 | Smitha

1 | Tarun

(2 rows)

cqlsh:students1> SELECT roll_no as "USN" from students_info;

USN

5

1

2

4

6

3

(6 rows)

cqlsh:students1> UPDATE students_info SET StudName='David Sheen' WHERE

Roll_No=2;bmsce@bmsce-Precision-T1700:~\$ cd cassandra/apache-cassandra-3.11.0/

bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0\$ cd bin

bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0/bin\$./cqlsh

Connected to Test Cluster at 127.0.0.1:9042.

[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]

Use HELP for help.

cqlsh> CREATE KEYSPACE Students1 WITH REPLICATION =

{'class':'SimpleStrategy','replication_factor':1};

cqlsh> DESCRIBE KEYSPACES

students system_auth students1 employee

system_schema system system_distributed system_traces

cqlsh:students> USE Students1;

cqlsh:students1> CREATE TABLE Students_Info(Roll_No int PRIMARY KEY, StudName text,
DateOfJoining timestamp, last_exam_Percent double);

cqlsh:students1> DESCRIBE TABLES;

students_info

cqlsh:students1> DESCRIBE TABLE Students_info;

CREATE TABLE students1.students_info (

roll_no int PRIMARY KEY,

dateofjoining timestamp,

last_exam_percent 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';

```

```

cqlsh:students1> BEGIN BATCH
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (1,'Tarun','2012-03-12',78.9)
... APPLY BATCH;
cqlsh:students1> SELECT* FROM Students_info;
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
1 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Tarun
(1 rows)

```

```

cqlsh:students1> BEGIN BATCH
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (2,'Asha','2012-03-12',79.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (3,'Krian','2012-03-12',89.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (4,'Samrth','2012-03-12',90.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (5,'Smitha','2012-03-12',67.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (6,'Rohan','2012-03-12',56.9)
... APPLY BATCH;
cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
4 | 2012-03-11 18:30:00.000000+0000 | 90.9 | Samrth
6 | 2012-03-11 18:30:00.000000+0000 | 56.9 | Rohan
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
(6 rows)

```

```

cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
(3 rows)

```

```

cqlsh:students1> select * from Students_info where Studname='Asha' ALLOW FILTERING;

```



```

roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
(1 rows)
cqlsh:students1> CREATE INDEX ON Students_Info (StudName);
cqlsh:students1> select * from students_info where Studname='Asha';
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
(1 rows)
cqlsh:students1> select Roll_No, StudName from students_info LIMIT 2;
roll_no | studname
-----+-----
5 | Smitha
1 | Tarun
(2 rows)
cqlsh:students1> SELECT roll_no as "USN" from students_info;
USN
-----
5
1
2
4
6
3
(6 rows)
cqlsh:students1> UPDATE students_info SET StudName='David Sheen' WHERE Roll_No=2;
cqlsh:students1> DELETE Last_Exam_Percent FROM students_info WHERE
Roll_No=2;bmsce@bmsce-Precision-T1700:~$ cd cassandra/apache-cassandra-3.11.0/
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0$ cd bin
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0/bin$ ./cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> CREATE KEYSPACE Students1 WITH REPLICATION =
{'class':'SimpleStrategy','replication_factor':1};
cqlsh> DESCRIBE KEYSPACES
students system_auth students1 employee
system_schema system system_distributed system_traces
cqlsh:students> USE Students1;
cqlsh:students1> CREATE TABLE Students_Info(Roll_No int PRIMARY KEY, StudName text,
DateOfJoining timestamp, last_exam_Percent double);
cqlsh:students1> DESCRIBE TABLES;
students_info
cqlsh:students1> DESCRIBE TABLE Students_info;
CREATE TABLE students1.students_info (

```

```

roll_no int PRIMARY KEY,
dateofjoining timestamp,
last_exam_percent 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';

```

```

cqlsh:students1> BEGIN BATCH
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (1,'Tarun','2012-03-12',78.9)
... APPLY BATCH;
cqlsh:students1> SELECT* FROM Students_info;
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
1 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Tarun
(1 rows)
cqlsh:students1> BEGIN BATCH
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (2,'Asha','2012-03-12',79.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (3,'Krian','2012-03-12',89.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (4,'Samrth','2012-03-12',90.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (5,'Smitha','2012-03-12',67.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (6,'Rohan','2012-03-12',56.9)
... APPLY BATCH;
cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
4 | 2012-03-11 18:30:00.000000+0000 | 90.9 | Samrth
6 | 2012-03-11 18:30:00.000000+0000 | 56.9 | Rohan
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian

```

(6 rows)

```
cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian

```

(3 rows)

```
cqlsh:students1> select * from Students_info where Studname='Asha' ALLOW FILTERING;
```

```

roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----

```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

(1 rows)

```
cqlsh:students1> CREATE INDEX ON Students_Info (StudName);
```

```
cqlsh:students1> select * from students_info where Studname='Asha';
```

```

roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----

```

```
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
```

(1 rows)

```
cqlsh:students1> select Roll_No, StudName from students_info LIMIT 2;
```

```

roll_no | studname
-----+-----

```

```
5 | Smitha
```

```
1 | Tarun
```

(2 rows)

```
cqlsh:students1> SELECT roll_no as "USN" from students_info;
```

```
USN
```

```
----
```

```
5
```

```
1
```

```
2
```

```
4
```

```
6
```

```
3
```

(6 rows)

```
cqlsh:students1> UPDATE students_info SET StudName='David Sheen' WHERE Roll_No=2;
```

```
cqlsh:students1> DELETE Last_Exam_Percent FROM bmsce@bmsce-Precision-T1700:~$ cd
cassandra/apache-cassandra-3.11.0/
```

```
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0$ cd bin
```

```
bmsce@bmsce-Precision-T1700:~/cassandra/apache-cassandra-3.11.0/bin$ ./cqlsh
```

```
Connected to Test Cluster at 127.0.0.1:9042.
```

[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]

Use HELP for help.

```
cqlsh> CREATE KEYSPACE Students1 WITH REPLICATION =
```

```
{'class':'SimpleStrategy','replication_factor':1};
```

```
cqlsh> DESCRIBE KEYSPACES
```

```
students system_auth students1 employee
```

```
system_schema system system_distributed system_traces
```

```
cqlsh:students> USE Students1;
```

```
cqlsh:students1> CREATE TABLE Students_Info(Roll_No int PRIMARY KEY, StudName text,  
DateOfJoining timestamp, last_exam_Percent double);
```

```
cqlsh:students1> DESCRIBE TABLES;
```

```
students_info
```

```
cqlsh:students1> DESCRIBE TABLE Students_info;
```

```
CREATE TABLE students1.students_info (
```

```
roll_no int PRIMARY KEY,
```

```
dateofjoining timestamp,
```

```
last_exam_percent 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';
```

```
cqlsh:students1> BEGIN BATCH
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```
... VALUES (1,'Tarun','2012-03-12',78.9)
```

```
... APPLY BATCH;
```

```
cqlsh:students1> SELECT* FROM Students_info;
```

```
roll_no | dateofjoining | last_exam_percent | studname
```

```
-----+-----+-----+-----
```

```
1 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Tarun
```

```
(1 rows)
```

```
cqlsh:students1> BEGIN BATCH
```

```
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
```

```

... VALUES (2,'Asha','2012-03-12',79.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (3,'Krian','2012-03-12',89.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (4,'Samrth','2012-03-12',90.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (5,'Smitha','2012-03-12',67.9)
... INSERT INTO Students_Info(Roll_No, StudName, DateOfJoining, last_exam_Percent)
... VALUES (6,'Rohan','2012-03-12',56.9)
... APPLY BATCH;
cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
4 | 2012-03-11 18:30:00.000000+0000 | 90.9 | Samrth
6 | 2012-03-11 18:30:00.000000+0000 | 56.9 | Rohan
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
(6 rows)
cqlsh:students1> 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 | 89.9 | Tarun
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
3 | 2012-03-11 18:30:00.000000+0000 | 89.9 | Krian
(3 rows)
cqlsh:students1> select * from Students_info where Studname='Asha' ALLOW FILTERING;

roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
(1 rows)
cqlsh:students1> CREATE INDEX ON Students_Info (StudName);
cqlsh:students1> select * from students_info where Studname='Asha';
roll_no | dateofjoining | last_exam_percent | studname
-----+-----+-----+-----
2 | 2012-03-11 18:30:00.000000+0000 | 79.9 | Asha
(1 rows)
cqlsh:students1> select Roll_No, StudName from students_info LIMIT 2;
roll_no | studname
-----+-----
5 | Smitha
1 | Tarun
(2 rows)
cqlsh:students1> SELECT roll_no as "USN" from students_info;
USN

```

5

1

2

4

6

3

(6 rows)

cqlsh:students1> UPDATE students_info SET StudName='David Sheen' WHERE Roll_No=2;

cqlsh:students1> DELETE Last_Exam_Percent FROM students_info WHERE Roll_No=2;

cqlsh:students1> DELETE FROM students_info WHERE Roll_No=2;students_info WHERE Roll_No=2;

cqlsh:students1> DELETE FROM students_info WHERE Roll_No=2;

cqlsh:students1> DELETE FROM students_info WHERE Roll_No=2;

cqlsh:students1> DELETE Last_Exam_Percent FROM students_info WHERE Roll_No=2;

cqlsh:students1> DELETE FROM students_info WHERE Roll_No=2;