

BDA LAB 4

```
bmsce@bmsce-Precision-T1700:~$ 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 library WITH replication = {'class' :
'SimpleStrategy', 'replication_factor' : 1};
...
cqlsh> create KEYSPACE library WITH replication = {'class' :
'SimpleStrategy', 'replication_factor' : 1};
AlreadyExists: Keyspace 'library' already exists
cqlsh> create KEYSPACE LIBRARY WITH replication = {'class' :
'SimpleStrategy', 'replication_factor' : 1};
AlreadyExists: Keyspace 'library' already exists
cqlsh> create KEYSPACE libraries WITH replication = {'class' :
'SimpleStrategy', 'replication_factor' : 1};
cqlsh> use libraries;
cqlsh:libraries> CREATE TABLE library_info ( stud_id int, counter_val
counter, stud_name text, book_id int, date_of_issue date, PRIMARY
KEY(stud_id, stud_name, book_id, date_of_issue));
cqlsh:libraries> select * from library_info;

stud_id | stud_name | book_id | date_of_issue | counter_val
-----+-----+-----+-----+-----
(0 rows)
cqlsh:libraries> begin batch
... insert into library_info(stud_id, counter_val, stud_name, book_id,
date_of_issue)
... values(100, 1, 'Hemang',
cqlsh:libraries> ALTER TABLE library_info ADD book_name<text>;
```

SyntaxException: line 1:38 no viable alternative at input '<' (ALTER TABLE library_info ADD book_name[<]...)

cqlsh:libraries> ALTER TABLE library_info ADD book_name <text>;

SyntaxException: line 1:39 no viable alternative at input '<' (ALTER TABLE library_info ADD book_name [<]...)

cqlsh:libraries> ALTER TABLE library_info ADD book_name text;

ConfigurationException: Cannot add a non counter column (book_name) in a counter column family

cqlsh:libraries> CREATE TABLE libraryinfo (stud_id int, counter_val counter, stud_name text, book_id int, date_of_issue date, PRIMARY KEY(stud_id, stud_name, book_id, book_name, date_of_issue));

InvalidRequest: Error from server: code=2200 [Invalid query]

message="Unknown definition book_name referenced in PRIMARY KEY"

cqlsh:libraries> Cue date, PRIMARY KEY(stud_id, REATE TABLE libraryinfo (stud_id int, counter_val counter, stud_name text, book_name text, book_id int, date_of_issstud_name, book_id, book_name, date_of_issue));

cqlsh:libraries> select * from library_info;

stud_id	stud_name	book_id	date_of_issue	counter_val
---------	-----------	---------	---------------	-------------

(0 rows)

cqlsh:libraries> select * from libraryinfo;

stud_id	stud_name	book_id	book_name	date_of_issue	counter_val
---------	-----------	---------	-----------	---------------	-------------

(0 rows)

cqlsh:libraries> begin batch

... insert into library_info(stud_id, counter_val, stud_name, book_name, book_id, date_of_issue)

... values(100, 0, 'Hemang', 'BDA', '1290', '2020-01-20');

... insert into library_info(stud_id, counter_val, stud_name, book_name, book_id, date_of_issue)

```

... values(100, 0, 'Hemang', 'BDA', '1290', '2018-10-23');
... insert into library_info(stud_id, counter_val, stud_name,
book_name, book_id, date_of_issue)
... values(100, 0, 'Hemang', 'BDA', '1290', '2018-10-23');
cqlsh:libraries> begin batch
... insert into libraryinfo(stud_id, counter_val, stud_name,
book_name, book_id, date_of_issue)
... values(100, 0, 'Hemang', 'BDA', '1290', '2018-10-23');
... insert into libraryinfo(stud_id, counter_val, stud_name,
book_name, book_id, date_of_issue)
... values(112, 0, 'Sam', 'DataScience', '1291', '2020-09-14');
cqlsh:libraries> update libraryinfo SET counter_value=counter_value+1
where stud_id=100 and stud_name='Hemang' and book_name='BDA' and
book_id='1291' and date_of_issue='2020-10-09';
InvalidRequest: Error from server: code=2200 [Invalid query]
message="Undefined column name counter_value"
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=100 and stud_name='Hemang' and book_name='BDA' and
book_id='1291' and date_of_issue='2020-10-09';
InvalidRequest: Error from server: code=2200 [Invalid query]
message="Invalid STRING constant (1291) for "book_id" of type int"
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=100 and stud_name='Hemang' and book_name='BDA' and
book_id=1291 and date_of_issue='2020-10-09';
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=112 and stud_name='Sam' and book_name='BDA' and
book_id=1280 and date_of_issue='2020-02-12';
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=129 and stud_name='Jen' and book_name='DataScience' and
book_id=3009 and date_of_issue='2020-12-24';
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=115 and stud_name='Jon' and book_name='CNS' and
book_id=8765 and date_of_issue='2020-03-08';
cqlsh:libraries> select * from libraryinfo;

```

stud_id	stud_name	book_id	book_name	date_of_issue	counter_val
129	Jen	3009	DataScience	2020-12-24	1
112	Sam	1280	BDA	2020-02-12	1
115	Jon	8765	CNS	2020-03-08	1
100	Hemang	1291	BDA	2020-10-09	1

(4 rows)

```
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_name='Hemang';
```

InvalidRequest: Error from server: code=2200 [Invalid query]
message="Some partition key parts are missing: stud_id"

```
cqlsh:libraries> update libraryinfo SET counter_val=counter_val+1 where
stud_id=100 and stud_name='Hemang' and book_name='BDA' and
book_id=1291 and date_of_issue='2020-10-09';
```

```
cqlsh:libraries> select * from libraryinfo;
```

stud_id	stud_name	book_id	book_name	date_of_issue	counter_val
129	Jen	3009	DataScience	2020-12-24	1
112	Sam	1280	BDA	2020-02-12	1
115	Jon	8765	CNS	2020-03-08	1
100	Hemang	1291	BDA	2020-10-09	2

(4 rows)

```
cqlsh:libraries> CREATE index on libraryinfo(book_name);
```

InvalidRequest: Error from server: code=2200 [Invalid query]
message="Secondary indexes are not supported on counter tables"

```
cqlsh:libraries> CREATE index on libraryinfo (book_name);
```

InvalidRequest: Error from server: code=2200 [Invalid query]
message="Secondary indexes are not supported on counter tables"

```
cqlsh:libraries> select counter_val from libraryinfo where stud_id=112 and
book_name='BDA';
```

```

InvalidRequest: Error from server: code=2200 [Invalid query]
message="PRIMARY KEY column "book_name" cannot be restricted as
preceding column "stud_name" is not restricted"
cqlsh:libraries> CREATE INDEX ON libraryinfo (book_name);
InvalidRequest: Error from server: code=2200 [Invalid query]
message="Secondary indexes are not supported on counter tables"
cqlsh:libraries> CREATE INDEX ON libraryinfo(book_name);
InvalidRequest: Error from server: code=2200 [Invalid query]
message="Secondary indexes are not supported on counter tables"
cqlsh:libraries> select * from libraryinfo where counter_val=2 allow filtering;

```

stud_id	stud_name	book_id	book_name	date_of_issue	counter_val
100	Hemang	1291	BDA	2020-10-09	2

(1 rows)

```

cqlsh:libraries> copy libraryinfo to data.csv;
Improper copy command.
cqlsh:libraries> COPY libraryinfo to data.csv;
Improper COPY command.
cqlsh:libraries> COPY libraryinfo to 'data.csv';
Using 11 child processes

```

Starting copy of libraries.libraryinfo with columns [stud_id, stud_name, book_id, book_name, date_of_issue, counter_val].

Processed: 4 rows; Rate: 24 rows/s; Avg. rate: 24 rows/s

4 rows exported to 1 files in 0.189 seconds.

```

cqlsh:libraries> COPY LIBRARYINFOCOPY FROM '/Desktop/data.csv';

```

Column family 'libraryinfocopy' not found

```

cqlsh:libraries> COPY LIBRARYINFOCOPY(stud_id, stud_name, book_id,
book_name, date_of_issue, counter_val) FROM '/Desktop/data.csv';

```

Column family 'libraryinfocopy' not found

```

cqlsh:libraries>

```