

LIBRARY [Anvitha Gowda K-1BM18CS018]

1. Create a keyspace by name Library

```
CREATE KEYSPACE library WITH REPLICATION={ 'class' : 'SimpleStrategy',  
'replication_factor' : 1};
```

```
USE library;
```

```
cqlsh> CREATE KEYSPACE library WITH REPLICATION={ 'class' : 'SimpleStrategy', 'replication_factor' : 1};  
cqlsh> USE library;
```

2. Create a column family by name Library-Info with attributes

Stud_Id Primary Key, Counter_value of type Counter,

Stud_Name, Book-Name, Book-Id, Date_of_issue

```
create table library_info(stud_id int, counter_value Counter, stud_name  
text,book_name text, date_of_issue timestamp, book_id int, PRIMARY  
KEY(stud_id,stud_name,book_name,date_of_issue,book_id));
```

```
library> create table library_info(stud_id int, counter_value Counter, stud_name text,book_name text, date_of_issue timestamp, book_id int,  
book_name,date_of_issue,book_id));
```

3. Insert the values into the table in batch

```
UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 111  
and stud_name = 'Anvitha' and book_name = 'ML' and date_of_issue =  
'2020-10-11'and book_id = 200;
```

```
UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 112
and stud_name = 'Nikhil' and book_name = 'BDA' and date_of_issue =
'2020-09-21'and book_id = 300;
UPDATE library_info SET counter_value = counter_value + 1 WHERE
stud_id = 113 and stud_name = 'Likitha' and book_name = 'OOMD' and
date_of_issue = '2020-04-01'and book_id = 400;
SELECT * FROM library_info;
```

```
cqlsh:library> UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 111 and stud_name = 'SAM' and book_name = 'ML' and date_of_issue = '2020-10-11'
and book_id = 200;
cqlsh:library> UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 112 and stud_name = 'SHAAN' and book_name = 'BDA' and date_of_issue = '2020-09-
21'and book_id = 300;
cqlsh:library> UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 113 and stud_name = 'AYMAN' and book_name = 'OOMD' and date_of_issue = '2020-04
-01'and book_id = 400;
cqlsh:library> SELECT * FROM library_info;
```

stud_id	stud_name	book_name	date_of_issue	book_id	counter_value
111	SAM	ML	2020-10-10 18:30:00.000000+0000	200	1
113	AYMAN	OOMD	2020-03-31 18:30:00.000000+0000	400	1
112	SHAAN	BDA	2020-09-20 18:30:00.000000+0000	300	1

(3 rows)

4. Display the details of the table created and increase the value of the counter

```
UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 112
and stud_name = 'Nikhil' and book_name = 'BDA' and date_of_issue =
'2020-09-21'and book_id = 300;
```

5. Write a query to show that a student with id 112 has taken a book “BDA” 2 times.

```
SELECT * FROM library_info WHERE stud_id = 112;
```

```
cqlsh:library> UPDATE library_info SET counter_value = counter_value + 1 WHERE stud_id = 112 and stud_name = 'SHAAN' and book_name = 'BDA' and date_of_issue = '2020-09-21' and book_id = 300;
cqlsh:library> SELECT * FROM library_info;
```

stud_id	stud_name	book_name	date_of_issue	book_id	counter_value
111	SAM	HL	2020-10-10 18:30:00.000000+0000	200	1
113	AYMAN	QOHD	2020-03-31 18:30:00.000000+0000	400	1
112	SHAAN	BDA	2020-09-20 18:30:00.000000+0000	300	2

```
(3 rows)
cqlsh:library> SELECT * FROM library_info WHERE stud_id = 112;
```

stud_id	stud_name	book_name	date_of_issue	book_id	counter_value
112	SHAAN	BDA	2020-09-20 18:30:00.000000+0000	300	2

```
(1 rows)
```

6. Export the created column to a csv file

COPY

Library_Info(Stud_Id,Stud_Name,Book_Name,Book_Id,Date_Of_Issue,Counter_value) TO 'e:\libraryInfo.csv';

```
cqlsh:library> COPY library_info2(stud_id,stud_name,book_name,book_id,date_of_issue,counter_value) FROM 'e:\libraryInfo.csv';
Using 3 child processes

Starting copy of library.library_info2 with columns [stud_id, stud_name, book_name, book_id, date_of_issue, counter_value].
```

7. Import a given csv dataset from local file system into Cassandra column family

create table library_info2(stud_id int, counter_value Counter, stud_name text,book_name text, date_of_issue timestamp, book_id int, PRIMARY KEY(stud_id,stud_name,book_name,date_of_issue,book_id));

COPY

library_info2(stud_id,stud_name,book_name,book_id,date_of_issue,counter_value) FROM 'e:\libraryInfo.csv';

```
cqlsh:library> create table library_info2(stud_id int, counter_value Counter, stud_name text,book_name text, date_of_issue timestamp, book_id int, PRIMARY KEY(stud_id,stud_name,book_name,date_of_issue,book_id));
cqlsh:library> COPY library_info2(stud_id,stud_name,book_name,book_id,date_of_issue,counter_value) FROM 'e:\libraryInfo.csv';
Using 3 child processes

Starting copy of library.library_info2 with columns [stud_id, stud_name, book_name, book_id, date_of_issue, counter_value].
```

```
cqlsh:library> SELECT * FROM library_info2;
```

stud_id	stud_name	book_name	date_of_issue	book_id	counter_value
111	SAM	ML	2020-10-10 18:30:00.000000+0000	200	1
113	AYMAN	OOMD	2020-03-31 18:30:00.000000+0000	400	1
112	SHAAN	BDA	2020-09-20 18:30:00.000000+0000	300	2

```
(3 rows)
```

```
cqlsh:library> SELECT * FROM library_info2;
```