USN:1BM18CS103 LAB2-LIBRARY DATE:01-04-2021

1.Create a keyspace by name Library

```
cqlsh> describe keyspaces;

employee  system_auth         system_schema  system_views
system    system_distributed  system_traces  system_virtual_schema

cqlsh> CREATE KEYSPACE Library WITH REPLICATION={'class':'SimpleStrategy','replication_factor':1};
cqlsh> describe keyspaces;

employee  system       system_distributed  system_traces  system_virtual_schema
library   system_auth  system_schema       system_views
```

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

```
cqlsh:library> CREATE TABLE Library_Info (student_id int, student_Name text,book_name text,book_id int,Date_of_issue timestamp,primary key(student_id));
cqlsh:library> alter table Library_Info add counter_value counter;
cqlsh:library> describe tables;

library_info
```

3. Insert the values into the table in batch

```
cqlsh:library> select * from Library_Info;

 student_id | book_id | book_name | counter_value | date_of_issue                   | student_name
------------+---------+-----------+---------------+---------------------------------+--------------
        120 |    1000 |       BDA |          null | 2021-04-01 07:00:00.000000+0000 |       shreya
        123 |    1020 |        ML |          null | 2021-04-01 07:00:00.000000+0000 |        kiran
        122 |    1000 |       BDA |          null | 2021-04-01 07:00:00.000000+0000 |       sakshi
        121 |    1010 |      OOMD |          null | 2021-04-01 07:00:00.000000+0000 |         asha

(4 rows)
```

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

```
cqlsh:library> select * from Library_Info;

 student_id | book_id | book_name | counter_value | date_of_issue                   | student_name
------------+---------+-----------+---------------+---------------------------------+--------------
        120 |    1000 |       BDA |             2 | 2021-04-01 07:00:00.000000+0000 |       shreya
        123 |    1020 |        ML |             2 | 2021-04-01 07:00:00.000000+0000 |        kiran
        122 |    1000 |       BDA |             1 | 2021-04-01 07:00:00.000000+0000 |       sakshi
        121 |    1010 |      OOMD |             1 | 2021-04-01 07:00:00.000000+0000 |         asha

(4 rows)
```

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

```
cqlsh:library> select student_id from Library_Info where book_name='BDA' and counter_value=2 allow filtering;

 student_id
------------
        120

(1 rows)
```

6. Export the created column to a csv file

```
cqlsh:library> copy Library_Info(student_id,student_Name,book_name,book_name,book_id,counter_value) to 'week2.csv';
Using 1 child processes

Starting copy of library.library_info with columns [student_id, student_name, book_name, book_name, book_id, counter_value].
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
Processed: 4 rows; Rate:      37 rows/s; Avg. rate:      37 rows/s
4 rows exported to 1 files in 0.113 seconds.
cqlsh:library> copy Library_Info(student_id,student_Name,book_name,book_name,book_id,counter_value) to 'd:\week2.csv';
Using 1 child processes

Starting copy of library.library_info with columns [student_id, student_name, book_name, book_name, book_id, counter_value].
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
Processed: 4 rows; Rate:      46 rows/s; Avg. rate:      46 rows/s
4 rows exported to 1 files in 0.090 seconds.
```

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

```
cqlsh:library> copy Library_Info(student_id,student_Name,book_name,book_name,book_id,counter_value) from 'd:\week2.csv';
Using 1 child processes

Starting copy of library.library_info with columns [student_id, student_name, book_name, book_name, book_id, counter_value].
cqlsh:library> copy Library_Info(student_id,student_Name,book_name,book_name,book_id,counter_value) to stdout;
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
122,sakshi,BDA,BDA,1000,1
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
120,shreya,BDA,BDA,1000,2
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
121,asha,OOMD,OOMD,1010,1
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
123,kiran,ML,ML,1020,2
cqlsh:library>
```