Lab 5 Cassandra Part - II

A. Table: library_student_info

B.Table:book_counter_info

C. Insert Data in Batch

```
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 library_db WITH replication = {'class': 'SimpleStrategy', 'replication_factor': 1};
cqlsh> USE library_db;
cqlsh:library_db> CREATE TABLE library_student_info (
             ...      stud_id int PRIMARY KEY,
             ...      stud_name text,
             ...      book_name text,
             ...      book_id int,
             ...      date_of_issue date
             ... );
cqlsh:library_db> CREATE TABLE book_counter_info (
             ...      stud_id int,
             ...      book_name text,
             ...      counter_value counter,
             ...      PRIMARY KEY (stud_id, book_name)
             ... );
cqlsh:library_db> BEGIN BATCH
             ... INSERT INTO library_student_info (stud_id, stud_name, book_name, book_id, date_of_issue)
             ... VALUES (112, 'David', 'BDA', 401, '2024-03-12');
             ... UPDATE book_counter_info SET counter_value = counter_value + 1
             ... WHERE stud_id = 112 AND book_name = 'BDA';
             ... APPLY BATCH;
InvalidRequest: Error from server: code=2200 [Invalid query] message="Counter and non-counter mutations cannot exist in the same batch"
```

You can repeat the `UPDATE` if you want to increment the counter multiple times. To Simulate Borrowing Book "BDA" 2 Times by Student 112

Display Table & Increase Counter

Query: Student 112 took "BDA" 2 times

```
cqlsh:library_db> -- First: Insert normal data (non-counter)
cqlsh:library_db> INSERT INTO library_student_info (stud_id, stud_name, book_name, book_id, date_of_issue)
              ... VALUES (112, 'David', 'BDA', 401, '2024-03-12');
cqlsh:library_db> -- Then: Update the counter table separately
cqlsh:library_db> UPDATE book_counter_info
              ... SET counter_value = counter_value + 1
              ... WHERE stud_id = 112 AND book_name = 'BDA';
cqlsh:library_db> -- Insert once (already done above)
cqlsh:library_db> -- Increment counter again
cqlsh:library_db> UPDATE book_counter_info
              ... SET counter_value = counter_value + 1
              ... WHERE stud_id = 112 AND book_name = 'BDA';
cqlsh:library_db> SELECT * FROM library_student_info;

 stud_id | book_id | book_name | date_of_issue | stud_name
---------+---------+-----------+---------------+-----------
     112 |     401 |       BDA |    2024-03-12 |     David

(1 rows)
cqlsh:library_db> SELECT * FROM book_counter_info;

 stud_id | book_name | counter_value
---------+-----------+---------------
     112 |       BDA |             2

(1 rows)
cqlsh:library_db>
cqlsh:library_db> -- Increment counter again:
cqlsh:library_db> UPDATE book_counter_info SET counter_value = counter_value + 1
              ... WHERE stud_id = 112 AND book_name = 'BDA';
cqlsh:library_db> SELECT counter_value FROM book_counter_info
              ... WHERE stud_id = 112 AND book_name = 'BDA';

 counter_value
---------------
             3
```