

08/04/25 Cassandra Exercise

1. Create a keyspace by name library

```
create keyspace library with Replication  
= { 'class' : 'SimpleStrategy',  
  'replication_factor': 1 };
```

2. Create a column family by name library_info with attributes

```
create table library_info ( stud_id  
int, stud_name text, book_name Text,  
book_id int, date_of_issue = date,  
counter_val counter, PRIMARY KEY  
((stud_id, book_id), stud_name, book_name,  
date_of_issue ));
```

3. Insert the values into the table in batch

BEGIN BATCH

UPDATE library_info

SET counter_val = counter_val + 5

WHERE stud_id = 1 AND book_id = 101
AND date_of_issue = '2025-04-08';

UPDATE library_info

SET counter_val = counter_val - 5

WHERE stud_id = 2 AND book_id = 102
AND date_of_issue = '2025-04-09';


```

UPDATE library_info
SET counter_val = counter_val + 5
WHERE stud_id = 3 AND book_id = 103
AND stud_name = 'John Doe 3' AND
book_name = 'Book Title 3' AND
date_of_issue = '2025-04-10' --
APPLY BATCH;
select * from library_info;

```

stud_id	book_id	stud_name	book name	doi	counter_val
1	101	John	B.T.1	04-08	5
2	102	Bill	BT 2	05-08	5
3	103	Carley	BT 3	06-08	5
4	104	David	BT 4	02-08	5

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

```

select counter_val from library_info
where stud_id = 4 allow filtering;

```

counter_val
10
↑

5. Write a query to show that a student with id 4 has taken "BT.4" 10 times

```

#4) UPDATE library_info SET counter_val = counter_val + 5 WHERE stud_id = 4
and book_name = 'Book Title 4' AND
date_of_issue = '2025-06-11';

```


6. Export the created column to a csv file

COPY Library, Library Info TO

'library_info.csv' WITH HEADER=TRUE;

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

COPY Library, Library Info FROM

'library_info.csv' WITH HEADER=TRUE;

for by shubh