

LAB-05 :-

So Task 1:- Create a Keyspace by the name "Library"

```
→ CREATE KEYSPACE Library
    ... WITH replication = {
    ... 'class': 'SimpleStrategy',
    ... 'replication_factor': 1
    ... };
```

⇒ Table Created.

USE Library;

Task 2:- Creating 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 C~~

```
Stud-Id int,
Stud-Name text,
Book-Name text,
Book-Id text,
Date-of-issue date,
PRIMARY KEY (Stud-Id, Book-Id)
);
```


Counter Table to track book count:

```
→ CREATE TABLE Book-Counter (  
    Stud-Id int,  
    Book-Name text,  
    Counter-Value counter,  
    PRIMARY KEY (Stud-Id, Book-Name)  
);
```

Task 3:- Inserting the values into the table in batch.

→ BEGIN BATCH

```
INSERT INTO Library-Info (Stud-Id,  
    Stud-Name, Book-Name, Book-Id, Date of issue)  
values (112, 'John Doe', 'BDA', 'BK101', '2025-04-01');
```

```
INSERT INTO " " " "  
values (113, 'Alice Smith', 'IDL', 'BK102', '2025-04-02');
```

```
INSERT INTO " " " "  
values (114, 'Bob Lee', 'AI', 'BK103', '2025-04-03');
```

```
INSERT INTO " " " "  
values (115, 'Charlie Brown', 'BDA', 'BK101',  
    '2025-04-04');
```

```
INSERT INTO " " " "  
values (116, 'Daisy Ray', 'DS', 'BK104', '2025-04-05');
```

APPLY BATCH;

Task 4:- Displaying the details of the table created and increase the values of the counter

→ UPDATE Book-Counter SET Counter-Value = Counter-Value + 1 WHERE Stud-Id = 112 AND Book-Name = 'BDA';

UPDATE _____
_____ WHERE Stud-Id = 113 AND Book-Name = 'ML';

UPDATE _____
_____ WHERE Stud-Id = 114 AND Book-Name = 'A.I';

UPDATE _____
_____ WHERE Stud-Id = 115 AND Book-Name = 'BDA';

~~UPDATE _____
_____ WHERE Stud-Id = 116 AND Book-Name = 'DS';~~

Task 5:- Write a query to show that a student with Id 112 has taken a book 'BDA' 2 times

→ SELECT * FROM Book-Counter WHERE Stud-Id = 112 AND Book-Name = 'BDA';

=>

<u>stud-id</u>	<u>book-name</u>	<u>counter-value</u>
112	BDA	2

Task 6:- Export the created column to a csv file

cqlsh -e "COPY library.library_info TO 'library_info-export.csv' WITH HEADER = TRUE;"

Final Table:-

→ SELECT * FROM library_info;

<u>stud-id</u>	<u>book-id</u>	<u>book-name</u>	<u>date-of-iss</u>
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114	BK103	AI	2025-04-03
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Stud_name

Bob Lee

Ausby 8/11/25