

Perform the following DB operators using Cassandra.

① create a keyspace by name library

```
CREATE KEYSPACE library
WITH REPLICATION = {
  'class' : 'simple strategy',
  'replication-factor' : 1 };
```

② create a column family by name library into with attribute stud-id primary key

Counter-value of type Counter,  
Stud-Name, Book-Name, Book-Id,  
Date-of-issue

```
CREATE TABLE library.library-into (
  stud-id INT PRIMARY KEY
  Counter-value Counter,
  Stud-Name Text,
  Book-Name Text,
  Date-of-issue TIME.STAMP
);
```

③ Counter table.

```
CREATE TABLE Book-Counter (
  stud-id, int
  Book-Name text,
  Counter-value Counter,
  PRIMARY KEY (stud-id, Book-Name)
);
```

3) Insert the values into 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 Library\_Info (Stud\_ID, Stud\_Name, Book\_Name, Book\_Id, Date\_of\_Issue)  
VALUES (113, 'Alice Smith', 'ML', 'BK160',  
'2025-04-02');

VALUES (114, 'Charles Brown', 'BDA', 'BK101',  
'2005-04-03');

VALUES (116, 'Daisy Ray', 'DS', 'BK104',  
'2025-04-06');

APPLY BATCH;

4) Display the details of the table created & increase the value of counter.

BEGIN BATCH

UPDATE BOOK\_COUNTER, Counter\_Value =  
Counter\_Value + 1 WHERE Stud\_ID = 110 &  
Book\_Name = 'BDA';

\_\_\_\_\_ = 112 AND 'BDA';

\_\_\_\_\_ = 113 AND 'ML';

\_\_\_\_\_ = 114 AND 'AI';

\_\_\_\_\_ = 115 AND 'BDA';

\_\_\_\_\_ = 116 AND 'DS';



5) write a query to show that a student with 112 has taken a book 'BDA' 2 times.

SELECT \* FROM Book-Counter.

WHERE stud-id = 112 AND Book-Name = 'BDA'

Output

Stud-id	Book-name	count-var
112	BDA	2

6) Export the created column to a CSV file cqlsn as "copy library info to library-info-export.csv" WITH HEADER TRUE "

SELECT \* FROM library-info ;

stud-id	book-id	bookname	date-of-y	shu
114	BK 103	AI	2025-04-03	Boban
113	102	ML	2025-04-02	Alicen
116	104	DS	2025-04-06	Darshay
112	101	BDA	2025-04-05	Johnay
115	101	BDA	2025-04-04	Charli

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