

II. Perform the following DB operations using Cassandra.

1. Create a keyspace by name Library

```
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.8 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
WARNING: pyreadline dependency missing. Install to enable tab completion.
cqlsh> CREATE KEYSPACE LIBRARY WITH replication = {'class': 'SimpleStrategy', 'replication_factor': 3};
cqlsh> use LIBRARY;
```

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

3. Insert the values into the table in batch

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

```
cqlsh:library> CREATE COLUMNFAMILY libraryinfo(stud_id uuid, counter_value counter, stud_name VARCHAR, book_name VARCHAR, book_id INT, DOI VARCHAR, PRIMARY KEY(stud_id,stud_name,book_name,book_id,doi));
cqlsh:library> UPDATE libraryinfo set counter_value=counter_value+1 where stud_id=cdd43759-bc64-4119-91bf-3e9ec59ca966 and stud_name='Anjali' and book_name='malgudi' and book_id=1 and doi='1/2/2020';
cqlsh:library> UPDATE libraryinfo set counter_value=counter_value+1 where stud_id=uuid() and stud_name='Ayush' and book_name='Hardy boys' and book_id=1 and doi='1/2/2020';
cqlsh:library> UPDATE libraryinfo set counter_value=counter_value+1 where stud_id=uuid() and stud_name='meghna' and book_name='BDA' and book_id=1 and doi='1/2/2020';
cqlsh:library> select * from libraryinfo;
```

stud_id	stud_name	book_name	book_id	doi	counter_value
cad37759-ed02-450c-80ef-922233c9bd9a	Ayush	Hardy boys	1	1/2/2020	1
cdd43759-bc64-4119-91bf-3e9ec59ca966	Anjali	malgudi	1	1/2/2020	1
84e49a4c-94be-4178-8205-c69e379c87d1	meghna	BDA	1	1/2/2020	1

(3 rows)

4. Write a query to show that a student with id 112 has taken a book "BDA" 2 times.

```
cqlsh:library> UPDATE libraryinfo set counter_value=counter_value+1 where stud_id=84e49a4c-94be-4178-8205-c69e379c87d1 and stud_name='meghna' and book_name='BDA' and book_id=1 and doi='1/2/2020';
cqlsh:library> select * from libraryinfo;
```

stud_id	stud_name	book_name	book_id	doi	counter_value
cad37759-ed02-450c-80ef-922233c9bd9a	Ayush	Hardy boys	1	1/2/2020	1
cdd43759-bc64-4119-91bf-3e9ec59ca966	Anjali	malgudi	1	1/2/2020	1
84e49a4c-94be-4178-8205-c69e379c87d1	meghna	BDA	1	1/2/2020	2

(3 rows)

```
cqlsh:library> SELECT * from libraryinfo where counter_value=2 ALLOW FILTERING;
```

stud_id	stud_name	book_name	book_id	doi	counter_value
84e49a4c-94be-4178-8205-c69e379c87d1	meghna	BDA	1	1/2/2020	2

(1 rows)

5. Export the created column to a csv file

```
cqlsh:library> CAPTURE 'C:\Users\sumuk\OneDrive\Desktop\BDA-SUMUKH\user.csv';
Now capturing query output to 'C:\\Users\\sumuk\\OneDrive\\Desktop\\BDA-SUMUKH\\user.csv'.
```