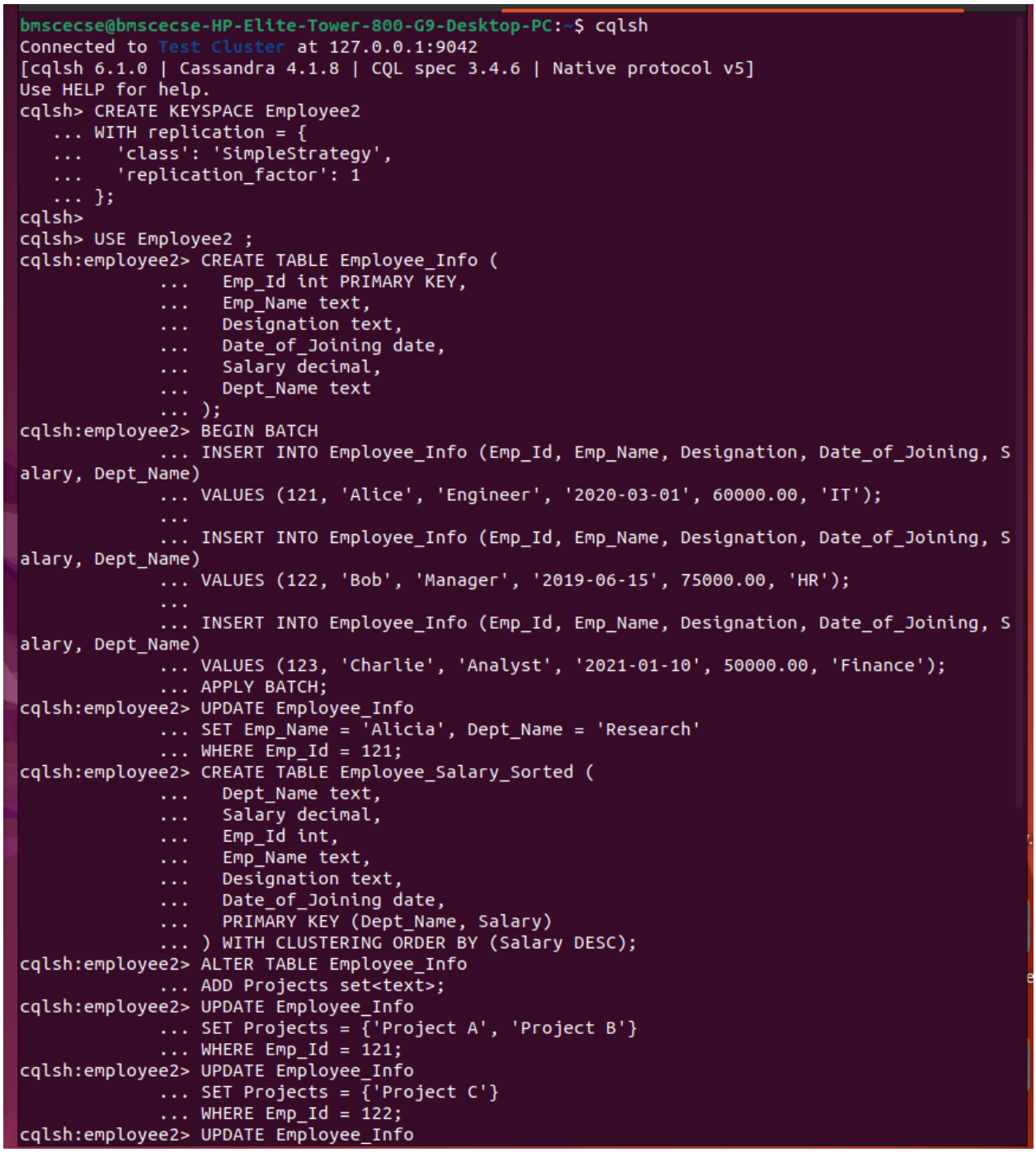
MANYA VAID (1BM22CS150)
Ubuntu

EMPLOYEE->



```
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 4.1.8 | CQL spec 3.4.6 | Native protocol v5]
Use HELP for help.
cqlsh> CREATE KEYSPACE Employee2
   ... WITH replication = {
   ...   'class': 'SimpleStrategy',
   ...   'replication_factor': 1
   ... };
cqlsh>
cqlsh> USE Employee2 ;
cqlsh:employee2> CREATE TABLE Employee_Info (
             ...   Emp_Id int PRIMARY KEY,
             ...   Emp_Name text,
             ...   Designation text,
             ...   Date_of_Joining date,
             ...   Salary decimal,
             ...   Dept_Name text
             ... );
cqlsh:employee2> BEGIN BATCH
             ... INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, S
alary, Dept_Name)
             ... VALUES (121, 'Alice', 'Engineer', '2020-03-01', 60000.00, 'IT');
             ...
             ... INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, S
alary, Dept_Name)
             ... VALUES (122, 'Bob', 'Manager', '2019-06-15', 75000.00, 'HR');
             ...
             ... INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, S
alary, Dept_Name)
             ... VALUES (123, 'Charlie', 'Analyst', '2021-01-10', 50000.00, 'Finance');
             ... APPLY BATCH;
cqlsh:employee2> UPDATE Employee_Info
             ... SET Emp_Name = 'Alicia', Dept_Name = 'Research'
             ... WHERE Emp_Id = 121;
cqlsh:employee2> CREATE TABLE Employee_Salary_Sorted (
             ...   Dept_Name text,
             ...   Salary decimal,
             ...   Emp_Id int,
             ...   Emp_Name text,
             ...   Designation text,
             ...   Date_of_Joining date,
             ...   PRIMARY KEY (Dept_Name, Salary)
             ... ) WITH CLUSTERING ORDER BY (Salary DESC);
cqlsh:employee2> ALTER TABLE Employee_Info
             ... ADD Projects set<text>;
cqlsh:employee2> UPDATE Employee_Info
             ... SET Projects = {'Project A', 'Project B'}
             ... WHERE Emp_Id = 121;
cqlsh:employee2> UPDATE Employee_Info
             ... SET Projects = {'Project C'}
             ... WHERE Emp_Id = 122;
cqlsh:employee2> UPDATE Employee_Info
```

```
cqlsh:employee2> UPDATE Employee_Info
             ... USING TTL 15
             ... SET Emp_Name = 'Temporary', Dept_Name = 'Temp'
             ... WHERE Emp_Id = 124;
cqlsh:employee2> INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, S
alary, Dept_Name)
             ... VALUES (124, 'TempUser', 'Intern', '2025-04-08', 30000.00, 'TempDept')
             ... USING TTL 15;
cqlsh:employee2> SELECT * FROM Employee_Info;

 emp_id | date_of_joining | dept_name | designation | emp_name | projects                    |
 salary
--------+-----------------+-----------+-------------+----------+-----------------------------+
----------
    123 |      2021-01-10 |   Finance |     Analyst |  Charlie |                        null |
 50000.00
    122 |      2019-06-15 |        HR |     Manager |      Bob |              {'Project C'} |
 75000.00
    121 |      2020-03-01 |  Research |    Engineer |   Alicia | {'Project A', 'Project B'} |
 60000.00

(3 rows)
cqlsh:employee2>
```

LIBRARY->

```
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 4.1.8 | CQL spec 3.4.6 | Native protocol v5]
Use HELP for help.
cqlsh> CREATE KEYSPACE Library
   ... WITH replication = {
   ...   'class': 'SimpleStrategy',
   ...   'replication_factor': 1
   ... };
cqlsh> USE Library;
cqlsh:library> CREATE TABLE Book_Counter (
           ...   Stud_Id int,
           ...   Book_Name text,
           ...   Counter_Value counter,
           ...   PRIMARY KEY (Stud_Id, Book_Name)
           ... );
cqlsh:library> CREATE TABLE Library_Info (
           ...   Stud_Id int PRIMARY KEY,
           ...   Stud_Name text,
           ...   Book_Name text,
           ...   Book_Id text,
           ...   Date_of_Issue date
           ... );
cqlsh:library> BEGIN BATCH
           ...
           ... INSERT INTO Library_Info (Stud_Id, Stud_Name, Book_Name, Book_Id, Date_of_Issu
e)
           ... VALUES (112, 'Ravi', 'BDA', 'B001', '2025-04-07');
           ...
           ... UPDATE Book_Counter
           ... 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"
cqlsh:library> INSERT INTO Library_Info (
           ...     Stud_Id,
           ...     Stud_Name,
           ...     Book_Name,
           ...     Book_Id,
           ...     Date_of_Issue
           ... )
           ... VALUES (
           ...     112,
           ...     'Ravi',
           ...     'BDA',
           ...     'B001',
           ...     '2025-04-07'
           ... );
cqlsh:library> UPDATE Book_Counter
           ... SET Counter_Value = Counter_Value + 1
           ... WHERE Stud_Id = 112 AND Book_Name = 'BDA';
```

```
cqlsh:library> SELECT * FROM Library_Info;

 stud_id | book_id | book_name | date_of_issue | stud_name
---------+---------+-----------+---------------+-----------
     112 |    B001 |       BDA |    2025-04-07 |      Ravi

(1 rows)
cqlsh:library> UPDATE Book_Counter
           ... SET Counter_Value = Counter_Value + 1
           ... WHERE Stud_Id = 112 AND Book_Name = 'BDA';
cqlsh:library> SELECT * FROM Book_Counter WHERE Stud_Id = 112 AND Book_Name = 'BDA';

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

(1 rows)
cqlsh:library> COPY Library_Info TO 'library_info.csv' WITH HEADER = TRUE;
Using 16 child processes

Starting copy of library.library_info with columns [stud_id, book_id, book_name, date_of_issu
e, stud_name].
Processed: 1 rows; Rate:      12 rows/s; Avg. rate:      12 rows/s
1 rows exported to 1 files in 0.121 seconds.
```

```
0 rows imported from 1 files in 0.365 seconds (0 skipped).
cqlsh:library> COPY Library_Info (Stud_Id, Book_Id, Book_Name, Date_of_Issue, Stud_Name)
           ... FROM '/home/bmscecse/library_info.csv'
           ... WITH HEADER = TRUE;
Using 16 child processes

Starting copy of library.library_info with columns [stud_id, book_id, book_name, date_of_issu
e, stud_name].
Processed: 3 rows; Rate:       6 rows/s; Avg. rate:       8 rows/s
3 rows imported from 1 files in 0.365 seconds (0 skipped).
cqlsh:library> COPY Library_Info (Stud_Id, Book_Id, Book_Name, Date_of_Issue, Stud_Name)
           ... TO '/home/bmscecse/library_info_export.csv'
           ... WITH HEADER = TRUE;
Using 16 child processes

Starting copy of library.library_info with columns [stud_id, book_id, book_name, date_of_issu
e, stud_name].
Processed: 3 rows; Rate:      69 rows/s; Avg. rate:      69 rows/s
3 rows exported to 1 files in 0.076 seconds.
cqlsh:library>
cqlsh:library>
```