BDA LAB - 3

1. Create a key space by name Employee

```
cqlsh> create keyspace Employee2 with replication = {'class':'SimpleStrategy','replication_factor':1};
cqlsh> describe Employee2;

CREATE KEYSPACE employee2 WITH replication = {'class': 'SimpleStrategy', 'replication_factor': '1'}  AND durable_writes = true;
```

2. Create a column family by name Employee-Info with attributes Emp_Id Primary Key, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name

```
cqlsh> create table Employee2.Employee_Info(Emp_ID int Primary key,Emp_Name text,Designation text, Date_of_Joining timestamp,Salary double,Dept_Name text);
cqlsh> select * from Employee2.Employee_Info;

 emp_id | date_of_joining | dept_name | designation | emp_name | salary
--------+-----------------+-----------+-------------+----------+--------

(0 rows)
cqlsh>
```

3. Insert the values into the table in batch

```
cqlsh> begin batch insert into Employee2.Employee_Info(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(2,'2020-03-07','Development','Manager','Tarun',1500000.0);insert into Employee2.E
mployee_Info(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(3,'2021-03-29','R&D','Web developer','Nithish',750000.0); apply batch;
cqlsh> select * from Employee2.Employee_Info;

 emp_id | date_of_joining              | dept_name   | designation   | emp_name | salary
--------+------------------------------+-------------+---------------+----------+--------
      1 | 2022-04-26 18:30:00.000000+0000 |  Deployment |     Team lead | Prem Sai |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000 | Development |       Manager |    Tarun | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000 |         R&D | Web developer |  Nithish | 7.5e+05

(3 rows)
```

4. Update Employee name and Department of Emp-Id 121

```
cqlsh> update Employee2.Employee_Info set emp_name = 'Harsha',dept_name='Testing' where emp_id = 3;
cqlsh> select * from Employee2.Employee_Info;

 emp_id | date_of_joining                 | dept_name   | designation   | emp_name | salary
--------+---------------------------------+-------------+---------------+----------+--------
      1 | 2022-04-26 18:30:00.000000+0000 |  Deployment |     Team lead | Prem Sai |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000 | Development |       Manager |    Tarun | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000 |     Testing | Web developer |   Harsha | 7.5e+05
```

5. Sort the details of Employee records based on salary

```
cqlsh> create table Employee2.emp(Emp_Id int ,Salary double,primary key(Emp_Id,Salary));
cqlsh> begin batch
   ... insert into Employee2.emp(emp_Id,salary) values(1,1000000);
   ... insert into Employee2.emp(emp_Id,salary) values(2,1500000);
   ... insert into Employee2.emp(emp_Id,salary) values(3,700000);
   ... apply batch;
cqlsh> select * from Employee2.emp;

 emp_id | salary
--------+--------
      1 |   1e+06
      2 | 1.5e+06
      3 |   7e+05

(3 rows)
cqlsh> paging off;
Disabled Query paging.
cqlsh> select * from Employee2.emp where emp_id in(1,2,3) order by salary;

 emp_id | salary
--------+--------
      3 |   7e+05
      1 |   1e+06
      2 | 1.5e+06

(3 rows)
```

6. Alter the schema of the table Employee_Info to add a column Projects which stores a set of Projects done by the corresponding Employee.

```
cqlsh> alter table Employee2.Employee_Info add Projects set<text>;
scqlsh> select * from Employee2.Employee_Info ;

 emp_id | date_of_joining                   | dept_name   | designation   | emp_name | projects | salary
--------+-----------------------------------+-------------+---------------+----------+----------+--------
      1 | 2022-04-26 18:30:00.000000+0000   | Deployment  |     Team lead | Prem Sai |    null  |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000   | Development |       Manager |    Tarun |    null  | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000   |     Testing | Web developer |   Harsha |    null  | 7.5e+05
```

7. Update the altered table to add project names.

```
cqlsh> update Employee2.Employee_Info set projects= projects+{'abc','xyz'} where emp_id=1;
cqlsh> select * from Employee2.Employee_Info ;

 emp_id | date_of_joining                   | dept_name   | designation   | emp_name | projects       | salary
--------+-----------------------------------+-------------+---------------+----------+----------------+--------
      1 | 2022-04-26 18:30:00.000000+0000   | Deployment  |     Team lead | Prem Sai | {'abc', 'xyz'} |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000   | Development |       Manager |    Tarun |           null | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000   |     Testing | Web developer |   Harsha |           null | 7.5e+05

(3 rows)
cqlsh> update Employee2.Employee_Info set projects= projects+{'def','pqr'} where emp_id=2;
cqlsh> update Employee2.Employee_Info set projects= projects+{'gjd','ads'} where emp_id=3;
cqlsh> select * from Employee2.Employee_Info ;

 emp_id | date_of_joining                   | dept_name   | designation   | emp_name | projects       | salary
--------+-----------------------------------+-------------+---------------+----------+----------------+--------
      1 | 2022-04-26 18:30:00.000000+0000   | Deployment  |     Team lead | Prem Sai | {'abc', 'xyz'} |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000   | Development |       Manager |    Tarun | {'def', 'pqr'} | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000   |     Testing | Web developer |   Harsha | {'ads', 'gjd'} | 7.5e+05
```

8 Create a TTL of 15 seconds to display the values of Employees.

```
cqlsh> insert into Employee2.Employee_Info(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(10,'2020-02-27','Development','Intern','XYZ',150000.0) using TTL 15;
cqlsh> select * from Employee2.Employee_Info ;

 emp_id | date_of_joining                 | dept_name   | designation   | emp_name | projects        | salary
--------+---------------------------------+-------------+---------------+----------+-----------------+---------
     10 | 2020-02-26 18:30:00.000000+0000 | Development |        Intern |      XYZ |            null | 1.5e+05
      1 | 2022-04-26 18:30:00.000000+0000 |  Deployment |     Team lead | Prem Sai | {'abc', 'xyz'}  |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000 | Development |       Manager |    Tarun | {'def', 'pqr'}  | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000 |     Testing | Web developer |   Harsha | {'ads', 'gjd'}  | 7.5e+05
```

```
cqlsh> select * from Employee2.Employee_Info ;

 emp_id | date_of_joining                 | dept_name   | designation   | emp_name | projects        | salary
--------+---------------------------------+-------------+---------------+----------+-----------------+---------
      1 | 2022-04-26 18:30:00.000000+0000 |  Deployment |     Team lead | Prem Sai | {'abc', 'xyz'}  |   1e+06
      2 | 2020-03-06 18:30:00.000000+0000 | Development |       Manager |    Tarun | {'def', 'pqr'}  | 1.5e+06
      3 | 2021-03-28 18:30:00.000000+0000 |     Testing | Web developer |   Harsha | {'ads', 'gjd'}  | 7.5e+05

(3 rows)
```