1.Create a key space by name Employee

```
bmsce@bmsce-Precision-T1700:~$ cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> CREATE KEYSPACE employee111 WITH replication = {'class':'SimpleStrategy', 'replication_factor' : 3};
cqlsh> use employee111;
```

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 5.0.1 | Cassandra 3.11.4 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> CREATE KEYSPACE employee111 WITH replication = {'class':'SimpleStrategy', 'replication_factor' : 3};
cqlsh> use employee111;
cqlsh:employee111> CREATE TABLE Employee111_info(emp_id int primary key,emp_name text,designation text,date_of_joining timestamp,salary int,dept_name text);
```

3.Insert the values into the table in batch

```
cqlsh:employee111> begin batch insert into employee111_info(emp_id,emp_name,designation,date_of_joining,salary,dept_name) values (1,'Muskan','Manager','2022-04-25',3000000,'xyz');
          ... insert into employee111_info(emp_id,emp_name,designation,date_of_joining,salary,dept_name) values (2,'Prakriti','Account','2022-04-05',370000,'fhn');
          ... insert into employee111_info(emp_id,emp_name,designation,date_of_joining,salary,dept_name) values (3,'Sakshi','asst engineer','2022-02-03',800000,'qwe');
          ... apply batch;
cqlsh:employee111> select * from employee111_info;

 emp_id | date_of_joining                 | dept_name | designation   | emp_name | salary
--------+---------------------------------+-----------+---------------+----------+---------
      1 | 2022-04-24 18:30:00.000000+0000 |       xyz |       Manager |   Muskan | 3000000
      2 | 2022-04-04 18:30:00.000000+0000 |       fhn |       Account |  Prakriti |  370000
      3 | 2022-02-02 18:30:00.000000+0000 |       qwe | asst engineer |   Sakshi |  800000
```

4. Update Employee name and Department of Emp-Id 2

```
cqlsh:employee111> update employee111_info set emp_name='Sanskriti',dept_name='abc' where emp_id=2;
cqlsh:employee111> select * from employee111_info;

 emp_id | date_of_joining                 | dept_name | designation   | emp_name  | salary
--------+---------------------------------+-----------+---------------+-----------+---------
      1 | 2022-04-24 18:30:00.000000+0000 |       xyz |       Manager |    Muskan | 3000000
      2 | 2022-04-04 18:30:00.000000+0000 |       abc |       Account | Sanskriti |  370000
      3 | 2022-02-02 18:30:00.000000+0000 |       qwe | asst engineer |    Sakshi |  800000

(3 rows)
```

5. Sort the details of Employee records based on salary

```
cqlsh:employee111> create table emp111(id int, salary int,name text, primary key(id,salary));
cqlsh:employee111> begin batch insert into emp(id,salary,name) values (1,89900,'kjl'); insert into emp(id,salary,name) values (2,70000,'uiu'); apply batch;
```

```
cqlsh:employee111> begin batch insert into emp111(id,salary,name) values (1,89900,'kjl'); insert into emp(id,salary,name) values (2,70000,'uiu'); apply batch;
```

```
cqlsh:employee111> begin batch insert into emp111(id,salary,name) values (1,89900,'kjl'); insert into emp111(id,salary,name) values (2,70000,'uiu'); apply batch;
cqlsh:employee111> paging off;
Disabled Query paging.
cqlsh:employee111> select * from emp111 where id in (1,2) order by salary;

 id | salary | name
----+--------+------
  2 |  70000 |  uiu
  1 |  89900 |  kjl

(2 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:employee111> alter table employee111_info add projects set<text>;
```

7. Update the altered table to add project names.

```
cqlsh:employee111> alter table employee111_info add projects set<text>;
cqlsh:employee111> update employee111_info set projects=projects+{'ooo','klk'} where emp_id=1;
cqlsh:employee111> update employee111_info set projects=projects+{'yyy'} where emp_id=2;
```

```
cqlsh:employee111> update employee111_info set projects=projects+{'zxz'} where emp_id=3;
cqlsh:employee111> select * from employee111_info;

 emp_id | date_of_joining                 | dept_name | designation   | emp_name  | projects         | salary
--------+---------------------------------+-----------+---------------+-----------+------------------+---------
      1 | 2022-04-24 18:30:00.000000+0000 |     xyz   |       Manager |    Muskan | {'klk', 'ooo'}   | 3000000
      2 | 2022-04-04 18:30:00.000000+0000 |     abc   |       Account | Sanskriti |        {'yyy'}   |  370000
      3 | 2022-02-02 18:30:00.000000+0000 |     qwe   | asst engineer |    Sakshi |        {'zxz'}   |  800000

(3 rows)
```

```
cqlsh:employee111> insert into employee111_info(emp_id,emp_name,designation,date_of_joining,salary,dept_name)
           ... values(4,'stu','manager','2021-02-02',400000,'sales')  using ttl 30;
cqlsh:employee111> select * from employee111_info;

 emp_id | date_of_joining                 | dept_name | designation   | emp_name  | projects         | salary
--------+---------------------------------+-----------+---------------+-----------+------------------+---------
      1 | 2022-04-24 18:30:00.000000+0000 |     xyz   |       Manager |    Muskan | {'klk', 'ooo'}   | 3000000
      2 | 2022-04-04 18:30:00.000000+0000 |     abc   |       Account | Sanskriti |        {'yyy'}   |  370000
      4 | 2021-02-01 18:30:00.000000+0000 |   sales   |       manager |       stu |          null    |  400000
      3 | 2022-02-02 18:30:00.000000+0000 |     qwe   | asst engineer |    Sakshi |        {'zxz'}   |  800000

(4 rows)
```

```
cqlsh:employee111> select ttl(emp_name) from employee111_info where emp_id=4;

 ttl(emp_name)
---------------


(0 rows)
cqlsh:employee111> ttl(emp_name)
```