1. **Create a keyspace by name Employee**

```
cqlsh> CREATE KEYSPACE Employee WITH REPLICATION={'class':'SimpleStrategy','replication_factor':1};
cqlsh> DESCRIBE KEYSPACES

employee  system_auth         system_schema  system_views
system    system_distributed  system_traces  system_virtual_schema

cqlsh> USE employees;
```

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> USE Employee
   ... ;
cqlsh:employee> CREATE TABLE Employee_Info (Emp_id int PRIMARY KEY, Emp_Name text,Designation text,
           ... Date_Of_Joining timestamp, salary double, Dept_name text);
cqlsh:employee> DESCRIBE TABLES;

employee_info
```

3. **Insert the values into the table in batch**

```
cqlsh:employee> select * from Employee_Info
            ... ;

 emp_id | date_of_joining                 | dept_name | designation | emp_name | salary
--------+---------------------------------+-----------+-------------+----------+--------
    120 | 2021-04-01 07:00:00.000000+0000 |       CSE |     Manager |     Asha |  30000
    123 | 2020-08-01 07:00:00.000000+0000 |       CSE |         Emp |  Samarth |  22500
    122 | 2019-05-01 07:00:00.000000+0000 |       CSE |         Emp |    Tarun |  22000
    121 | 2019-04-20 07:00:00.000000+0000 |       CSE |         Emp |    Kiran |  20000
    124 | 2019-06-01 07:00:00.000000+0000 |       CSE |         Emp |    Rohan |  21000

(5 rows)
```

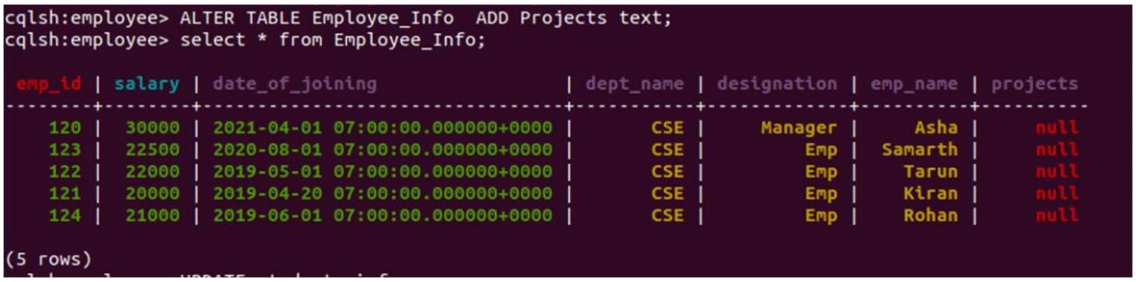
4. **Update Employee name and Department of Emp-Id 121**

```
cqlsh:employee> UPDATE Employee_Info SET Emp_Name='David', Dept_name='ECE' WHERE Emp_id=121;
cqlsh:employee> select * from Employee_Info
            ... ;

 emp_id | date_of_joining                 | dept_name | designation | emp_name | salary
--------+---------------------------------+-----------+-------------+----------+--------
    120 | 2021-04-01 07:00:00.000000+0000 |       CSE |     Manager |     Asha |  30000
    123 | 2020-08-01 07:00:00.000000+0000 |       CSE |         Emp |  Samarth |  22500
    122 | 2019-05-01 07:00:00.000000+0000 |       CSE |         Emp |    Tarun |  22000
    121 | 2019-04-20 07:00:00.000000+0000 |       ECE |         Emp |    David |  20000
    124 | 2019-06-01 07:00:00.000000+0000 |       CSE |         Emp |    Rohan |  21000

(5 rows)
```

**5. Alter the schema of the table Employee_Info to add a column Projects whichstores a set of Projects done by the corresponding Employee.**

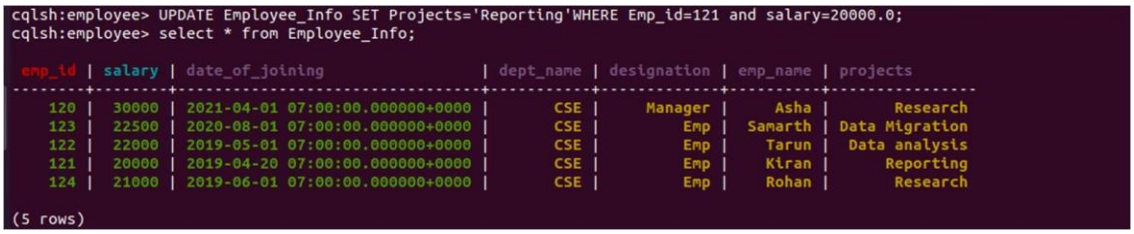


```
cqlsh:employee> ALTER TABLE Employee_Info  ADD Projects text;
cqlsh:employee> select * from Employee_Info;

 emp_id | salary | date_of_joining                 | dept_name | designation | emp_name | projects
--------+--------+---------------------------------+-----------+-------------+----------+----------
    120 |  30000 | 2021-04-01 07:00:00.000000+0000 |       CSE |     Manager |     Asha |     null
    123 |  22500 | 2020-08-01 07:00:00.000000+0000 |       CSE |         Emp |  Samarth |     null
    122 |  22000 | 2019-05-01 07:00:00.000000+0000 |       CSE |         Emp |    Tarun |     null
    121 |  20000 | 2019-04-20 07:00:00.000000+0000 |       CSE |         Emp |    Kiran |     null
    124 |  21000 | 2019-06-01 07:00:00.000000+0000 |       CSE |         Emp |    Rohan |     null

(5 rows)
```

**6. Update the altered table to add project names.**

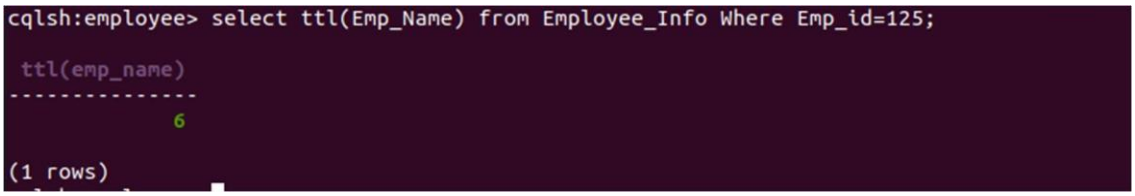


```
cqlsh:employee> UPDATE Employee_Info SET Projects='Reporting'WHERE Emp_id=121 and salary=20000.0;
cqlsh:employee> select * from Employee_Info;

 emp_id | salary | date_of_joining                 | dept_name | designation | emp_name | projects
--------+--------+---------------------------------+-----------+-------------+----------+----------------
    120 |  30000 | 2021-04-01 07:00:00.000000+0000 |       CSE |     Manager |     Asha |       Research
    123 |  22500 | 2020-08-01 07:00:00.000000+0000 |       CSE |         Emp |  Samarth | Data Migration
    122 |  22000 | 2019-05-01 07:00:00.000000+0000 |       CSE |         Emp |    Tarun |  Data analysis
    121 |  20000 | 2019-04-20 07:00:00.000000+0000 |       CSE |         Emp |    Kiran |      Reporting
    124 |  21000 | 2019-06-01 07:00:00.000000+0000 |       CSE |         Emp |    Rohan |       Research

(5 rows)
```

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



```
cqlsh:employee> select ttl(Emp_Name) from Employee_Info Where Emp_id=125;

 ttl(emp_name)
---------------
             6

(1 rows)
```