

1. Create a key space by name Employee

```
cqlsh> CREATE KEYSPACE ronaldo WITH replication = {'class':'SimpleStrategy','replication_factor':1};
cqlsh> describe ronaldo;

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

cqlsh> █
```

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 ronaldo.ronaldo_emp (emp_id int primary key,emp_name text,designation text ,date_of_joining timestamp,salary double ,dept_name text);
cqlsh> █
```

```
cqlsh> create table ronaldo.ronaldo_emp (emp_id int primary key,emp_name text,designation text ,date_of_joining timestamp,salary double ,dept_name text);
cqlsh> select * from ronaldo.ronaldo_emp;

 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 ronaldo.ronaldo_emp(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(2,'2020-09-03','development','web developer','harsha',170000.50);apply batch;
cqlsh> select * from ronaldo.ronaldo_emp;
```

```
 emp_id | date_of_joining | dept_name | designation | emp_name | salary
-----+-----+-----+-----+-----+-----
 2 | 2020-09-02 18:30:00.000000+0000 | development | web developer | harsha | 1.7e+05

(1 rows)
cqlsh> █
```

```
cqlsh> begin batch
... insert into ronaldo.ronaldo_emp(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(3,'2021-03-25','tester','analyst','parashiva',800000.50);
... insert into ronaldo.ronaldo_emp(emp_id,date_of_joining,dept_name,designation,emp_name,salary)values(4,'2021-03-06','developer','game developer','krishna',90000.50);
... apply batch;
cqlsh> select * from ronaldo.ronaldo_emp;

 emp_id | date_of_joining | dept_name | designation | emp_name | salary
-----+-----+-----+-----+-----+-----
 2 | 2020-09-02 18:30:00.000000+0000 | development | web developer | harsha | 1.7e+05
 4 | 2021-03-05 18:30:00.000000+0000 | developer | game developer | krishna | 90000.5
 3 | 2021-03-24 18:30:00.000000+0000 | tester | analyst | parashiva | 8e+05

(3 rows)
cqlsh> █
```

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

```
cqlsh> update ronaldo.ronaldo_emp SET emp_name='krishnathankt ',dept_name='developer' where emp_id=4;
cqlsh> select * from ronaldo.ronaldo_emp;
```

emp_id	date_of_joining	dept_name	designation	emp_name	salary
2	2020-09-02 18:30:00.000000+0000	development	web developer	harsha	1.7e+05
4	2021-03-05 18:30:00.000000+0000	developer	game developer	krishnathankt	90000.5
3	2021-03-24 18:30:00.000000+0000	tester	analyst	parashiva	8e+05

(3 rows)
cqlsh>

5. Sort the details of Employee records based on salary

```
cqlsh> create table ronaldo.rona_emp (emp_id int,emp_name text,designation text ,date_of_joining timestamp,salary double ,dept_name text,primary key(emp_id,salary));
cqlsh>
```

```
cqlsh> begin batch insert into ronaldo.rona_emp (emp_id,emp_name ,designation ,date_of_joining ,salary ,dept_name )values(1,'parashiva','developer','2021-03-06',800000.50,'web developer'); insert into ronaldo.
rona_emp (emp_id,emp_name ,designation ,date_of_joining ,salary ,dept_name )values(2,'anju','tester','2021-03-29',25000.50,'analyst'); insert into ronaldo.rona_emp (emp_id ,emp_name ,designation ,date_of_join
ing ,salary ,dept_name )values(3,'harsha','developer','2021-03-15',25800.50,'Full stack developer'); apply batch;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha

(3 rows)
cqlsh>

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

emp_id	salary	date_of_joining	dept_name	designation	emp_name
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva

(3 rows)
cqlsh>

5. 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 ronaldo.rona_emp add projects set<text>;
cqlsh> select * from ronaldo.rona_emp ;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name	projects
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva	null
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju	null
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha	null

(3 rows)
cqlsh>

7. Update the altered table to add project names.

```
cqlsh> update ronaldo.rona_emp set projects=projects+{'abc','xyz'} where emp_id=1 and salary=800000.50;
cqlsh> select * from ronaldo.rona_emp;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name	projects
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva	{'abc','xyz'}
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju	null
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha	null

(3 rows)
cqlsh>

```
cqlsh> update ronaldo.rona_emp set projects=projects+['def','lmn','pqrs','tuv'] where emp_id=2 and salary=25000.50;
cqlsh> update ronaldo.rona_emp set projects=projects+['xyz'] where emp_id=3 and salary=25800.50;
cqlsh> select * from ronaldo.rona_emp;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name	projects
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva	['abc', 'xyz']
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju	['def', 'lmn', 'pqrs', 'tuv']
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha	['xyz']

(3 rows)
cqlsh>

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

```
cqlsh> insert into ronaldo.rona_emp (emp_id ,emp_name,designation ,date_of_joining ,salary ,dept_name) values(5,'ntkhil','tester','2022-03-06',78000.50,'game developer') using TTL 15;
cqlsh> select * from ronaldo.rona_emp;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name	projects
5	78000.5	2022-03-05 18:30:00.000000+0000	game developer	tester	ntkhil	null
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva	['abc', 'xyz']
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju	['def', 'lmn', 'pqrs', 'tuv']
4	7000.5	2022-03-05 18:30:00.000000+0000	game developer	tester	anant	null
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha	['xyz']

(5 rows)
cqlsh>

```
(5 rows)
cqlsh> select * from ronaldo.rona_emp;
```

emp_id	salary	date_of_joining	dept_name	designation	emp_name	projects
1	8e+05	2021-03-05 18:30:00.000000+0000	web developer	developer	parashiva	['abc', 'xyz']
2	25000.5	2021-03-24 18:30:00.000000+0000	analyst	tester	anju	['def', 'lmn', 'pqrs', 'tuv']
4	7000.5	2022-03-05 18:30:00.000000+0000	game developer	tester	anant	null
3	25800.5	2021-03-14 18:30:00.000000+0000	Full stack developer	developer	harsha	['xyz']

(4 rows)
cqlsh>