Perform the following DB operations using Cassandra.

1. Create a key space by name Employee

```
cqlsh:employee2> create keyspace employee4 with replication={'class':'SimpleStrategy','replication_factor':'1'};
cqlsh:employee2>
```

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:employee2> create employee_info (id int Primary Key,name text,designation text,doj timestamp,salary double,department t
ext);
```

3. Insert the values into the table in batch

```
cqlsh:employee2> begin batch
             ... insert into employee_info(id,name,designation,doj,salary,department) values (1,'aruna','manager','2019-05-04
',125000,'management')
             ... insert into employee_info(id,name,designation,doj,salary,department) values (2,'manju','developer','2020-05-
04',105000,'dev')
             ... insert into employee_info(id,name,designation,doj,salary,department) values (3,'raj','developer','2021-05-04
',100000,'dev')
             ... apply batch;
```

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

```
cqlsh:employee2> update employee_info set name='ram',department='management' where id=2;
```

5. Sort the details of Employee records based on salary

```
cqlsh:employee2> select * from employee_info where id in(1,2,3) orderby salary;
```

```
 id | department | designation | doj                             | name  | salary
----+------------+-------------+---------------------------------+-------+----------
  1 | management |     manager | 2019-05-03 18:30:00.000000+0000 | aruna | 1.25e+05
  2 | management |   developer | 2020-05-03 18:30:00.000000+0000 |   ram | 1.05e+05
  3 |        dev |   developer | 2021-05-03 18:30:00.000000+0000 |   raj |    1e+05
```

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:employee2> alter table employee_info add projects set <text>;
cqlsh:employee2> select * from employee_info;

 id | department | designation | doj                             | name  | projects | salary
----+------------+-------------+---------------------------------+-------+----------+----------
  1 | management |     manager | 2019-05-03 18:30:00.000000+0000 | aruna |     null | 1.25e+05
  2 | management |   developer | 2020-05-03 18:30:00.000000+0000 |   ram |     null | 1.05e+05
  3 |        dev |   developer | 2021-05-03 18:30:00.000000+0000 |   raj |     null |    1e+05
```

7. Update the altered table to add project names.

```
cqlsh:employee2> update employee_info set projects=projects+{'p1','p2','p3'} where id=1;
cqlsh:employee2> select * from employee_info;

 id | department | designation | doj                             | name  | projects           | salary
----+------------+-------------+---------------------------------+-------+--------------------+----------
  1 | management |     manager | 2019-05-03 18:30:00.000000+0000 | aruna | {'p1', 'p2', 'p3'} | 1.25e+05
  2 | management |   developer | 2020-05-03 18:30:00.000000+0000 |   ram |               null | 1.05e+05
  3 |        dev |   developer | 2021-05-03 18:30:00.000000+0000 |   raj |               null |    1e+05
```

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

```
cqlsh:employee2> insert into employee_info(id,name,designation,doj,salary,department) values (4,'mamatha','marketing mana
,'2019-04-03',123000,'marketing') using ttl 45;
cqlsh:employee2> select * from employee_info;

 id | department | designation       | doj                             | name    | projects           | salary
----+------------+-------------------+---------------------------------+---------+--------------------+----------
  1 | management |           manager | 2019-05-03 18:30:00.000000+0000 |   aruna | {'p1', 'p2', 'p3'} | 1.25e+05
  2 | management |         developer | 2020-05-03 18:30:00.000000+0000 |     ram |               null | 1.05e+05
  4 |  marketing | marketing manager | 2019-04-02 18:30:00.000000+0000 | mamatha |               null | 1.23e+05
  3 |        dev |         developer | 2021-05-03 18:30:00.000000+0000 |     raj |               null |    1e+05

(4 rows)
cqlsh:employee2> select ttl(department) from employee_info;

 ttl(department)
-----------------
            null
            null
               2
            null

(4 rows)
```

```
(4 rows)
cqlsh:employee2> select * from employee_info;

 id | department | designation | doj                             | name  | projects           | salary
----+------------+-------------+---------------------------------+-------+--------------------+----------
  1 | management |     manager | 2019-05-03 18:30:00.000000+0000 | aruna | {'p1', 'p2', 'p3'} | 1.25e+05
  2 | management |   developer | 2020-05-03 18:30:00.000000+0000 |   ram |               null | 1.05e+05
  3 |        dev |   developer | 2021-05-03 18:30:00.000000+0000 |   raj |               null |    1e+05

(3 rows)
```