I. Perform the following DB operations using Cassandra.

1. Create a keyspace by name Employee

```
cqlsh> create keyspace Employee with replication={'class':'SimpleStrategy','replication_factor':'3'};
cqlsh> use Employee;
```

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 ,Emp_Name text,Designation text, Date_of_join date,Salary int,Dept
_name text,primary key(emp_id,salary));
```

3. Insert the values into the table in batch

```
cqlsh:employee> BEGIN BATCH
        ... insert into Employee_Info(Emp_Id,Emp_Name,Designation,Date_of_join,Salary,Dept_name)values  (120,'varshi
tha','Manager','2015-10-02',60000,'management');
        ... insert into Employee_Info(Emp_Id,Emp_Name,Designation,Date_of_join,Salary,Dept_name)values
        ... (121,'kavya','Assistant Manager','2015-10-02',50000,'management');
        ... insert into Employee_Info(Emp_Id,Emp_Name,Designation,Date_of_join,Salary,Dept_name)values
        ... (122,'Bhavya','developer','2015-10-02',40000,'development');
        ... insert into Employee_Info(Emp_Id,Emp_Name,Designation,Date_of_join,Salary,Dept_name)values
        ... (123,'Harshitha','Manager','2015-10-02',60000,'management');
        ... APPLY BATCH;
cqlsh:employee> select * from employee_info;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name
--------+--------+--------------+-------------+-------------------+-----------
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya
    121 |  50000 |   2015-10-02 |  management | Assistant Manager |     kavya

(4 rows)
```

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

```
cqlsh:employee>  update Employee_Info set Emp_Name='chaitanya', Dept_Name='Sales' where Emp_Id=121 and salary=50000;
cqlsh:employee> select * from employee_info;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name
--------+--------+--------------+-------------+-------------------+-----------
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya
    121 |  50000 |   2015-10-02 |       Sales | Assistant Manager | chaitanya

(4 rows)
```

5. Sort the details of Employee records based on salary 5.

```
(2 rows)
cqlsh:employee> select * from employee_info where emp_id in (120,121,122,123) order by salary;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name
--------+--------+--------------+-------------+-------------------+-----------
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya
    121 |  50000 |   2015-10-02 |       Sales | Assistant Manager | chaitanya
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha

(4 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:employee> select * from Employee_Info;

 emp_id | date_of_join | dept_name   | designation       | emp_name  | projects | salary
--------+--------------+-------------+-------------------+-----------+----------+--------
    120 |   2015-10-02 |  management |           Manager | varshitha |     null |  60000
    123 |   2015-10-02 |  management |           Manager | Harshitha |     null |  60000
    122 |   2015-10-02 | development |         developer |    Bhavya |     null |  40000
    121 |   2015-10-02 |       Sales | Assistant Manager |  chaitanya |    null |  50000

(4 rows)
```

7. Update the altered table to add project names.

```
cqlsh:employee> update Employee_Info set projects='a,b,c' where Emp_id=120 and salary= 60000;
cqlsh:employee> update Employee_Info set projects='a,b,c' where Emp_id=120 and salary= 60000;
cqlsh:employee>  update Employee_Info set projects='d,e,f' where Emp_id=121 and salary=50000;
cqlsh:employee>  update Employee_Info set projects='d,e,f' where Emp_id=122 and salary=40000;
cqlsh:employee>  update Employee_Info set projects='d,k,f' where Emp_id=123 and salary=60000;
cqlsh:employee> select * from employee_info;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name  | projects
--------+--------+--------------+-------------+-------------------+-----------+----------
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha |    a,b,c
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha |    d,k,f
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya |    d,e,f
    121 |  50000 |   2015-10-02 |       Sales | Assistant Manager | chaitanya |    d,e,f

(4 rows)
```

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

```
(4 rows)
cqlsh:employee>  insert into Employee_Info(Emp_Id,Emp_Name,Designation,Date_of_join,Salary,Dept_name)values
           ... (124,'Kavitha','Manager','2015-10-02',60000,'management') using TTL 15;
cqlsh:employee> select * from employee_info;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name  | projects
--------+--------+--------------+-------------+-------------------+-----------+----------
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha |    a,b,c
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha |    d,k,f
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya |    d,e,f
    121 |  50000 |   2015-10-02 |       Sales | Assistant Manager | chaitanya |    d,e,f
    124 |  60000 |   2015-10-02 |  management |           Manager |   Kavitha |     null

(5 rows)
cqlsh:employee> select * from employee_info;

 emp_id | salary | date_of_join | dept_name   | designation       | emp_name  | projects
--------+--------+--------------+-------------+-------------------+-----------+----------
    120 |  60000 |   2015-10-02 |  management |           Manager | varshitha |    a,b,c
    123 |  60000 |   2015-10-02 |  management |           Manager | Harshitha |    d,k,f
    122 |  40000 |   2015-10-02 | development |         developer |    Bhavya |    d,e,f
    121 |  50000 |   2015-10-02 |       Sales | Assistant Manager | chaitanya |    d,e,f
```