BDA LAB-6A 9/11/20

I. Perform the following DB operations using Cassandra.

1. Create a keyspace by name Employee

```
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.8 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
WARNING: pyreadline dependency missing.  Install to enable tab completion.
cqlsh> CREATE KEYSPACE Employee WITH replication = {'class':'SimpleStrategy','replication_factor':3};
```

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 COLUMNFAMILY employee_info(emp_id INT PRIMARY KEY,emp_name VARCHAR,desgination VARCHAR,doj VARCHAR,dept_name VARCHAR,salary INT);
```

3. Insert the values into the table in batch

```
cqlsh:employee> BEGIN BATCH
           ...         INSERT INTO employee_info(emp_id,dept_name,desgination,doj,emp_name,salary)values(120,'Development','CTO','10/11/2015','Ayush',2000000);
           ...         INSERT INTO employee_info(emp_id,dept_name,desgination,doj,emp_name,salary)values(121,'HR','Employee','20/01/2011','Raghav',1500000);
           ...         INSERT INTO employee_info(emp_id,dept_name,desgination,doj,emp_name,salary)values(122,'Maintainance','staff','10/07/2020','Sanjay',50000);
           ...         INSERT INTO employee_info(emp_id,dept_name,desgination,doj,emp_name,salary)values(123,'IT','Assistant','25/07/2014','Tanya',100000);
           ... APPLY BATCH;
cqlsh:employee> select * from employee_info;

 emp_id | dept_name    | desgination | doj        | emp_name | salary
--------+--------------+-------------+------------+----------+---------
    120 |  Development |         CTO | 10/11/2015 |    Ayush | 2000000
    123 |          IT |   Assistant | 25/07/2014 |    Tanya |  100000
    122 | Maintainance |       staff | 10/07/2020 |   Sanjay |   50000
    121 |           HR |    Employee | 20/01/2011 |   Raghav | 1500000

(4 rows)
```

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

```
cqlsh:employee> UPDATE employee_info SET emp_name='Mohan',dept_name='Testing' WHERE emp_id=121;
cqlsh:employee> select * from employee_info;

 emp_id | dept_name    | desgination | doj        | emp_name | salary
--------+--------------+-------------+------------+----------+---------
    120 |  Development |         CTO | 10/11/2015 |    Ayush | 2000000
    123 |          IT |   Assistant | 25/07/2014 |    Tanya |  100000
    122 | Maintainance |       staff | 10/07/2020 |   Sanjay |   50000
    121 |      Testing |    Employee | 20/01/2011 |    Mohan | 1500000

(4 rows)
```

5. Sort the details of Employee records based on salary

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.

7. Update the altered table to add project names.

```
cqlsh:employee> ALTER TABLE employee_info ADD Project VARCHAR;
cqlsh:employee> UPDATE employee_info SET project='TIP' WHERE emp_id=120;
cqlsh:employee> UPDATE employee_info SET project='Sentiment Analysis' WHERE emp_id=121;
cqlsh:employee> UPDATE employee_info SET project='Facial recognition' WHERE emp_id=123;
cqlsh:employee> select * from employee_info;

 emp_id | dept_name    | desgination | doj        | emp_name | project            | salary
--------+--------------+-------------+------------+----------+--------------------+---------
    120 |  Development |         CTO | 10/11/2015 |    Ayush |                TIP | 2000000
    123 |           IT |   Assistant | 25/07/2014 |    Tanya | Facial recognition |  100000
    122 | Maintainance |       staff | 10/07/2020 |   Sanjay |               null |   50000
    121 |      Testing |    Employee | 20/01/2011 |    Mohan | Sentiment Analysis | 1500000

(4 rows)
```

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

```
cqlsh:employee> INSERT INTO employee_info(emp_id, dept_name, desgination, doj, emp_name,project,salary)values
(124, 'PR','Senior Manager','8/8/2020','Load balancing server','Abhi',20000) USING TTL 15;
cqlsh:employee> SELECT TTL(desgination) FROM employee_info where emp_id=124;

 ttl(desgination)
------------------
               12
```