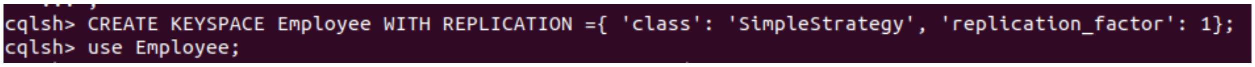
DAY 4

Lab program- Week 4

Perform the following DB operations using Cassandra.

1.Create a keyspace by name Employee

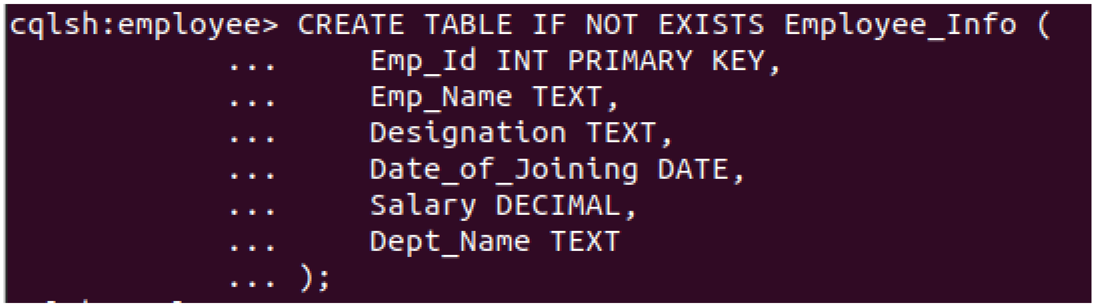
CREATE KEYSPACE Employee WITH REPLICATION ={ 'class': 'SimpleStrategy', 'replication_factor': 1};



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

```
CREATE TABLE IF NOT EXISTS Employee_Info (
        Emp_Id INT PRIMARY KEY,
        Emp_Name TEXT,
        Designation TEXT,
        Date_of_Joining DATE,
        Salary DECIMAL,
        Dept_Name TEXT
);
```



```
cqlsh:employee> CREATE TABLE IF NOT EXISTS Employee_Info (
            ...     Emp_Id INT PRIMARY KEY,
            ...     Emp_Name TEXT,
            ...     Designation TEXT,
            ...     Date_of_Joining DATE,
            ...     Salary DECIMAL,
            ...     Dept_Name TEXT
            ... );
```

3. Insert the values into the table in batch

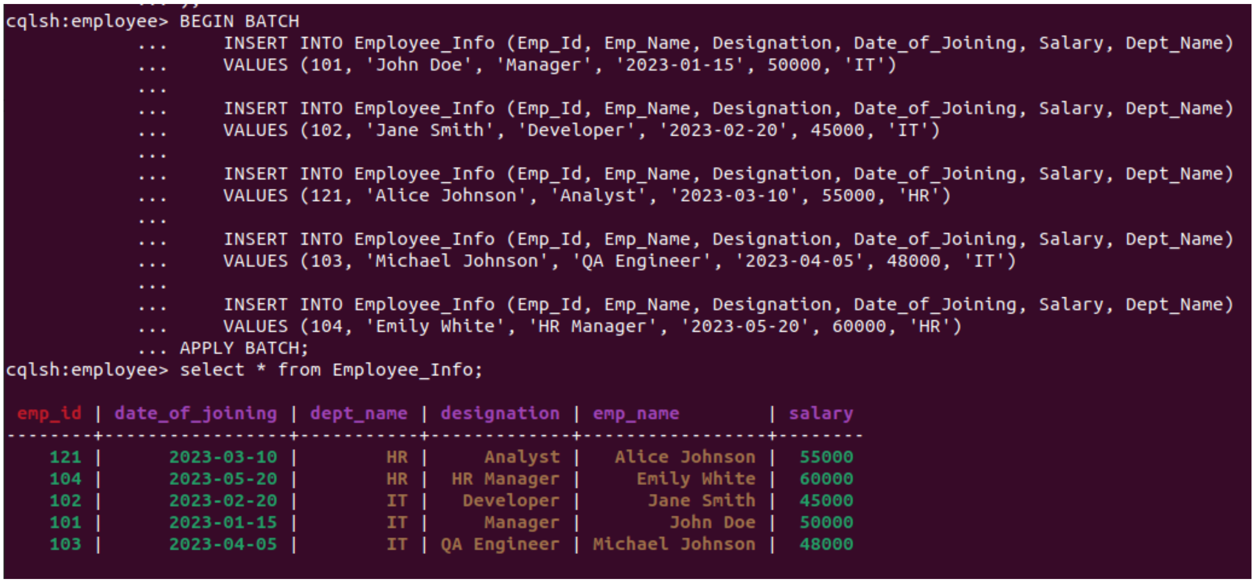
```
BEGIN BATCH
        INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining,
Salary, Dept_Name)
        VALUES (101, 'John Doe', 'Manager', '2023-01-15', 50000, 'IT')

        INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining,
Salary, Dept_Name)
        VALUES (102, 'Jane Smith', 'Developer', '2023-02-20', 45000, 'IT')

        INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining,
Salary, Dept_Name)
        VALUES (121, 'Alice Johnson', 'Analyst', '2023-03-10', 55000, 'HR')
```

INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
VALUES (103, 'Michael Johnson', 'QA Engineer', '2023-04-05', 48000, 'IT')

INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
VALUES (104, 'Emily White', 'HR Manager', '2023-05-20', 60000, 'HR')
APPLY BATCH;

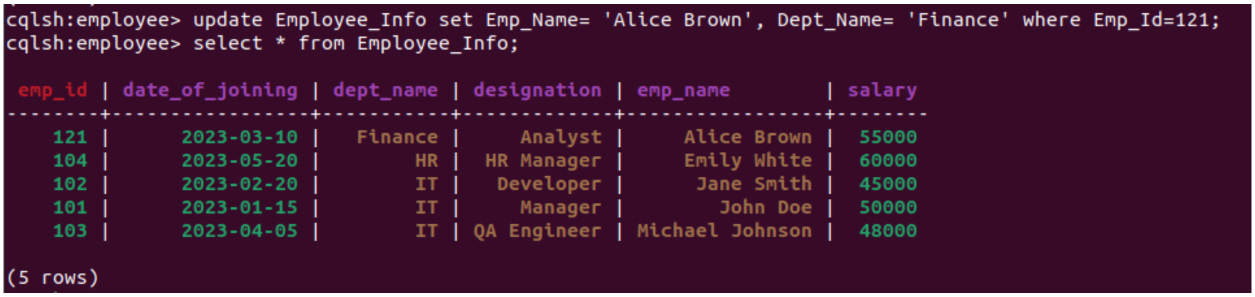


```
cqlsh:employee> BEGIN BATCH
            ...     INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
            ...     VALUES (101, 'John Doe', 'Manager', '2023-01-15', 50000, 'IT')
            ...
            ...     INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
            ...     VALUES (102, 'Jane Smith', 'Developer', '2023-02-20', 45000, 'IT')
            ...
            ...     INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
            ...     VALUES (121, 'Alice Johnson', 'Analyst', '2023-03-10', 55000, 'HR')
            ...
            ...     INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
            ...     VALUES (103, 'Michael Johnson', 'QA Engineer', '2023-04-05', 48000, 'IT')
            ...
            ...     INSERT INTO Employee_Info (Emp_Id, Emp_Name, Designation, Date_of_Joining, Salary, Dept_Name)
            ...     VALUES (104, 'Emily White', 'HR Manager', '2023-05-20', 60000, 'HR')
            ... APPLY BATCH;
cqlsh:employee> select * from Employee_Info;

 emp_id | date_of_joining | dept_name | designation | emp_name        | salary
--------+-----------------+-----------+-------------+-----------------+--------
    121 |      2023-03-10 |        HR |     Analyst |   Alice Johnson |  55000
    104 |      2023-05-20 |        HR |  HR Manager |     Emily White |  60000
    102 |      2023-02-20 |        IT |   Developer |      Jane Smith |  45000
    101 |      2023-01-15 |        IT |     Manager |        John Doe |  50000
    103 |      2023-04-05 |        IT | QA Engineer | Michael Johnson |  48000
```

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

update Employee_Info set Emp_Name= 'Alice Brown', Dept_Name= 'Finance' where Emp_Id=121;



```
cqlsh:employee> update Employee_Info set Emp_Name= 'Alice Brown', Dept_Name= 'Finance' where Emp_Id=121;
cqlsh:employee> select * from Employee_Info;

 emp_id | date_of_joining | dept_name | designation | emp_name        | salary
--------+-----------------+-----------+-------------+-----------------+--------
    121 |      2023-03-10 |   Finance |     Analyst |     Alice Brown |  55000
    104 |      2023-05-20 |        HR |  HR Manager |     Emily White |  60000
    102 |      2023-02-20 |        IT |   Developer |      Jane Smith |  45000
    101 |      2023-01-15 |        IT |     Manager |        John Doe |  50000
    103 |      2023-04-05 |        IT | QA Engineer | Michael Johnson |  48000

(5 rows)
```

5. Sort the details of Employee records based on salary