

This week Lab program to be executed...

Program 1. Perform the following DB operations using Cassandra.

1. Create a key space by name 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
3. Insert the values into the table in batch
4. Update Employee name and Department of Emp-Id 121
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.
- 8 Create a TTL of 15 seconds to display the values of Employees.



```

cqlsh> CREATE KEYSPACE employee1 WITH REPLICATION={ 'class': 'SimpleStrategy', 'replication_factor':1};
cqlsh> SELECT * FROM employee
...
cqlsh> SELECT * FROM employee1
...
cqlsh> SELECT * FROM employee1;
InvalidRequest: Error from server: code=2200 [Invalid query] message="No keyspace has been specified. USE a keyspace, or explicitly specify keyspace.tablename"
cqlsh> DESCRIBE KEYSPACES;

"Students"      newstudents  students      system_traces
system_schema   library      system_distributed employee1
system_auth     system      employee

cqlsh> use employee1
...
cqlsh> use employee1;
cqlsh:employee1> CREATE TABLE employee1-info ( Emp_id int PRIMARY KEY, Emp_Name text, Designation text, Date_of_Joining timestamp, Salary double, Dept_Name text);
SyntaxException: line 1:22 no viable alternative at input '-' (CREATE TABLE [employee1]-...)
cqlsh:employee1> CREATE TABLE employee1_info ( Emp_id int PRIMARY KEY, Emp_Name text, Designation text, Date_of_Joining timestamp, Salary double, Dept_Name text);
... CREATE TABLE employee1-info ( Emp_id int PRIMARY KEY, Emp_Name text, Designation text, Date_of_Joining timestamp, Salary double, Dept_Name text);
...
cqlsh:employee1> BEGIN BATCH
...
cqlsh:employee1> DESCRIBE TABLES;

employee1_info

cqlsh:employee1> BEGIN BATCH
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (1,'A','Asst Manager','2010-04-26',75000,'Marketing')
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (2,'B','Asst Manager','2010-04-26',75000,'Marketing')
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (3,'C','Asst Manager','2010-04-26',75000,'Technical')
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (4,'D','Asst Manager','2010-04-26',75000,'Technical')
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (5,'E','Manager','2010-04-26',75000,'PR')
... INSERT INTO employee1_info (Emp_id,Emp_Name,Designation,Date_of_Joining,Salary,Dept_Name)
... VALUES (6,'F','Manager','2010-04-26',75000,'PR')
... APPLY BATCH;
cqlsh:employee1> SELECT * FROM employee1_info;

```



```
cqlsh:employee1> SELECT * FROM employee1_info;
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emp_id	date_of_joining					
5	2010-04-25	18:30:00.000000+0000	PR	Manager	E	75000
1	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	A	75000
2	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	B	75000
4	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	D	75000
6	2010-04-25	18:30:00.000000+0000	PR	Manager	F	75000
3	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	C	75000

(6 rows)

```
cqlsh:employee1> UPDATE employee1_info SET Salary=65000 WHERE Emp_id=2;
cqlsh:employee1> UPDATE employee1_info SET Salary=55000 WHERE Emp_id=1;
cqlsh:employee1> UPDATE employee1_info SET Salary=85000 WHERE Emp_id=4;
cqlsh:employee1> UPDATE employee1_info SET Salary=95000 WHERE Emp_id=5;
cqlsh:employee1> UPDATE employee1_info SET Salary=100000 WHERE Emp_id=6;
cqlsh:employee1> SELECT * FROM employee1_info;
```

emp_id	date_of_joining		dept_name	designation	emp_name	salary
5	2010-04-25	18:30:00.000000+0000	PR	Manager	E	95000
1	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	A	55000
2	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	B	65000
4	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	D	85000
6	2010-04-25	18:30:00.000000+0000	PR	Manager	F	1e+05
3	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	C	75000

(6 rows)

```
cqlsh:employee1> ALTER TABLE employee1_info ADD projects list<test>;
InvalidRequest: Error from server: code=2200 [Invalid query] message="Non-frozen UDTs are not allowed inside collections: list<test>"
cqlsh:employee1> ALTER TABLE employee1_info ADD projects list<text>;
cqlsh:employee1> SELECT * FROM employee1_info;
```

emp_id	date_of_joining		dept_name	designation	emp_name	projects	salary
5	2010-04-25	18:30:00.000000+0000	PR	Manager	E	null	95000
1	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	A	null	55000
2	2010-04-25	18:30:00.000000+0000	Marketing	Asst Manager	B	null	65000
4	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	D	null	85000
6	2010-04-25	18:30:00.000000+0000	PR	Manager	F	null	1e+05
3	2010-04-25	18:30:00.000000+0000	Technical	Asst Manager	C	null	75000



```

(6 rows)
cqlsh:employee1> UPDATE employee1_info SET projects=['facebook','instagram'] WHERE Emp_id=1;
cqlsh:employee1> UPDATE employee1_info SET projects=['facebook','whatsapp'] WHERE Emp_id=2;
cqlsh:employee1> UPDATE employee1_info SET projects=['instagram','whatsapp'] WHERE Emp_id=3;
cqlsh:employee1> UPDATE employee1_info SET projects=['risk assesment','flutter'] WHERE Emp_id=4;
cqlsh:employee1> UPDATE employee1_info SET projects=['quora','flutter'] WHERE Emp_id=5;
cqlsh:employee1> UPDATE employee1_info SET projects=['quora','time track'] WHERE Emp_id=6;
cqlsh:employee1> SELECT * FROM employee1_info;

```

emp_id	date_of_joining	dept_name	designation	emp_name	projects	salary
5	2010-04-25 18:30:00.000000+0000	PR	Manager	E	['quora', 'flutter']	95000
1	2010-04-25 18:30:00.000000+0000	Marketing	Asst Manager	A	['facebook', 'instagram']	55000
2	2010-04-25 18:30:00.000000+0000	Marketing	Asst Manager	B	['facebook', 'whatsapp']	65000
4	2010-04-25 18:30:00.000000+0000	Technical	Asst Manager	D	['risk assesment', 'flutter']	85000
6	2010-04-25 18:30:00.000000+0000	PR	Manager	F	['quora', 'time track']	1e+05
3	2010-04-25 18:30:00.000000+0000	Technical	Asst Manager	C	['instagram', 'whatsapp']	75000

```

(6 rows)
cqlsh:employee1>

```