Assignment 7

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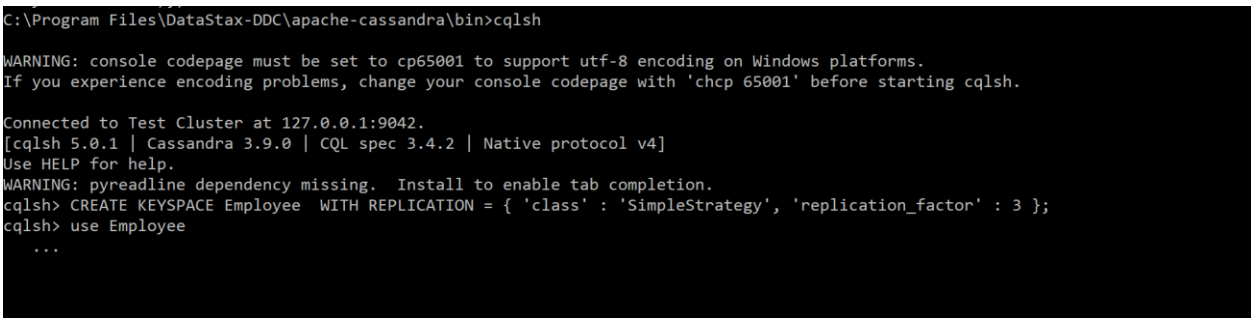
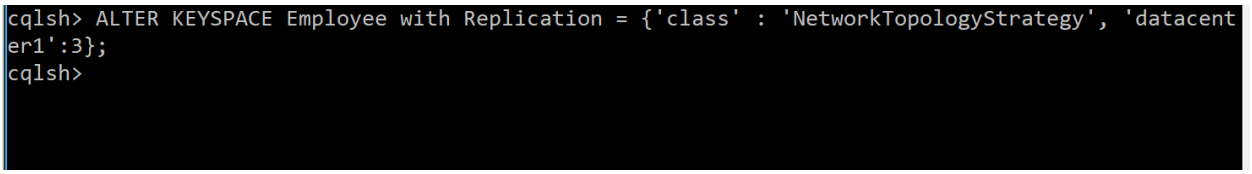
1) Creating the database:

```
CREATE KEYSPACE Employee  WITH REPLICATION = { 'class' : 'SimpleStrategy', 'replication_factor' : 3 };
Use Employee;
```



2) Altering the database:

```
ALTER KEYSPACE Employee with Replication = {'class' : 'NetworkTopologyStrategy', 'datacenter1':3};
```



3) Create a table:

```
CREATE TABLE  Employee.EmployeeDetails (
        employeeId text PRIMARY KEY,
        first_name text,
        last_name text,
        emails set<text>,
        department text,
        Salary map<timestamp, text>
      );
```

```
cqlsh> CREATE TABLE  Employee.EmployeeDetails (
   ...                employeeId text PRIMARY KEY,
   ...                first_name text,
   ...                last_name text,
   ...                emails set<text>,
   ...         department text,
   ...                Salary map<timestamp, text>
   ...              );
cqlsh>
```

4) View table definition.

Desc Employee.EmployeeDetails

```
cqlsh> desc Employee.EmployeeDetails

CREATE TABLE employee.employeedetails (
    employeeid text PRIMARY KEY,
    department text,
    emails set<text>,
    first_name text,
    last_name text,
    salary map<timestamp, text>
) WITH bloom_filter_fp_chance = 0.01
    AND caching = {'keys': 'ALL', 'rows_per_partition': 'NONE'}
    AND comment = ''
    AND compaction = {'class': 'org.apache.cassandra.db.compaction.SizeTieredCompactionStrategy',
 'max_threshold': '32', 'min_threshold': '4'}
    AND compression = {'chunk_length_in_kb': '64', 'class': 'org.apache.cassandra.io.compress.LZ4
Compressor'}
    AND crc_check_chance = 1.0
    AND dclocal_read_repair_chance = 0.1
    AND default_time_to_live = 0
    AND gc_grace_seconds = 864000
    AND max_index_interval = 2048
    AND memtable_flush_period_in_ms = 0
    AND min_index_interval = 128
    AND read_repair_chance = 0.0
    AND speculative_retry = '99PERCENTILE';

cqlsh>
```

5) Alter table and add a column.

ALTER TABLE Employee.EmployeeDetails add Gender text;

```
cqlsh>  ALTER TABLE Employee.EmployeeDetails add Gender text;
cqlsh> desc table
Improper desc command.
cqlsh> desc Employee.EmployeeDetails

CREATE TABLE employee.employeedetails (
    employeeid text PRIMARY KEY,
    department text,
    emails set<text>,
    first_name text,
    gender text,
    last_name text,
    salary map<timestamp, text>
) WITH bloom_filter_fp_chance = 0.01
    AND caching = {'keys': 'ALL', 'rows_per_partition': 'NONE'}
    AND comment = ''
    AND compaction = {'class': 'org.apache.cassandra.db.compaction.SizeTieredCompactionStrategy',
 'max_threshold': '32', 'min_threshold': '4'}
    AND compression = {'chunk_length_in_kb': '64', 'class': 'org.apache.cassandra.io.compress.LZ4
Compressor'}
    AND crc_check_chance = 1.0
    AND dclocal_read_repair_chance = 0.1
    AND default_time_to_live = 0
    AND gc_grace_seconds = 864000
    AND max_index_interval = 2048
    AND memtable_flush_period_in_ms = 0
    AND min_index_interval = 128
    AND read_repair_chance = 0.0
    AND speculative_retry = '99PERCENTILE';

cqlsh>
```

6) Insert into table.

```
INSERT INTO Employee.EmployeeDetails (employeeid ,
        first_name,
        last_name,
        emails ,
        department,
                salary,
                gender)  values ( '20001', 'Himanshu', 'Goyal',{'Himanshu@outlook.com',
'Himanshu@iu.edu'},'dev',{'2018-07-07':'60000'},'Male') ;
INSERT INTO Employee.EmployeeDetails (employeeid ,
        first_name,
        last_name,
        emails ,
        department,
                salary,
                gender)  values ( '20002', 'Sonal', 'Agarwal',{'Sonal@outlook.com',
'Sonal@iu.edu'},'QA',{'2018-07-07':'40000'},'Female') ;
```

```
INSERT INTO Employee.EmployeeDetails (employeeid ,
        first_name,
        last_name,
        emails ,
        department,
            salary,
            gender)  values ( '20003', 'Ankita', 'Singh',{'Ankita@outlook.com',
'Ankita@iu.edu'},'Support',{'2018-07-07':'20000'},'Female') ;
```

```
cqlsh> INSERT INTO Employee.EmployeeDetails (employeeid ,
   ...                first_name,
   ...                last_name,
   ...                emails ,
   ...                department,
   ... salary,
   ... gender)  values ( '20001', 'Himanshu', 'Goyal',{'Himanshu@outlook.com', 'Himanshu@iu.edu'}
,'dev',{'2018-07-07':'60000'},'Male') ;
cqlsh> INSERT INTO Employee.EmployeeDetails (employeeid ,
   ...                first_name,
   ...                last_name,
   ...                emails ,
   ...                department,
   ... salary,
   ... gender)  values ( '20002', 'Sonal', 'Agarwal',{'Sonal@outlook.com', 'Sonal@iu.edu'},'QA',{
'2018-07-07':'40000'},'Female') ;
cqlsh> INSERT INTO Employee.EmployeeDetails (employeeid ,
   ...                first_name,
   ...                last_name,
   ...                emails ,
   ...                department,
   ... salary,
   ... gender)  values ( '20003', 'Ankita', 'Singh',{'Ankita@outlook.com', 'Ankita@iu.edu'},'Supp
ort',{'2018-07-07':'20000'},'Female') ;
cqlsh>
```

7) Select from table:

```
select * from Employee.employeeDetails
  ... ;
```

```
cqlsh> select * from Employee.employeeDetails
   ... ;

 employeeid | department | emails                                          | first_name | gender | last_name | salary
------------+------------+-------------------------------------------------+------------+--------+-----------+-----------------------------------------------
      20003 |    Support |     {'Ankita@iu.edu', 'Ankita@outlook.com'} |     Ankita | Female |     Singh | {'2018-07-07 05:00:00.000000+0000': '20000'}
      20002 |         QA |       {'Sonal@iu.edu', 'Sonal@outlook.com'} |      Sonal | Female |   Agarwal | {'2018-07-07 05:00:00.000000+0000': '40000'}
      20001 |        dev | {'Himanshu@iu.edu', 'Himanshu@outlook.com'} |   Himanshu |   Male |     Goyal | {'2018-07-07 05:00:00.000000+0000': '60000'}

(3 rows)
cqlsh>
```

8) Update department of employee with id as 20003.

```
cqlsh> UPDATE Employee.EmployeeDetails SET department='HR' Where  employeeid='20003';
cqlsh> select * from Employee.employeeDetails;

 employeeid | department | emails                                          | first_name | gender | last_name | salary
------------+------------+-------------------------------------------------+------------+--------+-----------+-----------------------------------------------
      20003 |         HR |     {'Ankita@iu.edu', 'Ankita@outlook.com'} |     Ankita | Female |     Singh | {'2018-07-07 05:00:00.000000+0000': '20000'}
      20002 |         QA |       {'Sonal@iu.edu', 'Sonal@outlook.com'} |      Sonal | Female |   Agarwal | {'2018-07-07 05:00:00.000000+0000': '40000'}
      20001 |        dev | {'Himanshu@iu.edu', 'Himanshu@outlook.com'} |   Himanshu |   Male |     Goyal | {'2018-07-07 05:00:00.000000+0000': '60000'}

(3 rows)
cqlsh>
```

9) Delete from Employee table where employee id is 20003.

```
cqlsh> Delete From Employee.EmployeeDetails Where  employeeid='20003';
cqlsh> select * from Employee.employeeDetails;

 employeeid | department | emails                                          | first_name | gender | last_name | salary
------------+------------+-------------------------------------------------+------------+--------+-----------+-----------------------------------------------
      20002 |         QA |       {'Sonal@iu.edu', 'Sonal@outlook.com'} |      Sonal | Female |   Agarwal | {'2018-07-07 05:00:00.000000+0000': '40000'}
      20001 |        dev | {'Himanshu@iu.edu', 'Himanshu@outlook.com'} |   Himanshu |   Male |     Goyal | {'2018-07-07 05:00:00.000000+0000': '60000'}

(2 rows)
cqlsh>
```

10) Drop a Keyset.

Drop keyspace Employee;

```
(2 rows)
cqlsh> Drop keyspace Employee;
cqlsh>
```