NO SQL LAB – 5

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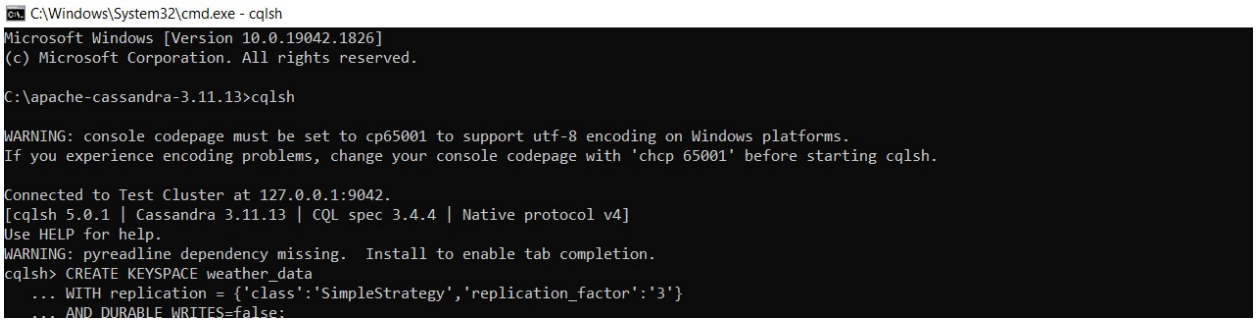
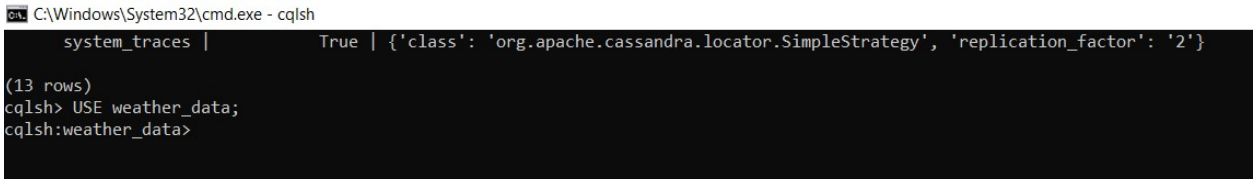
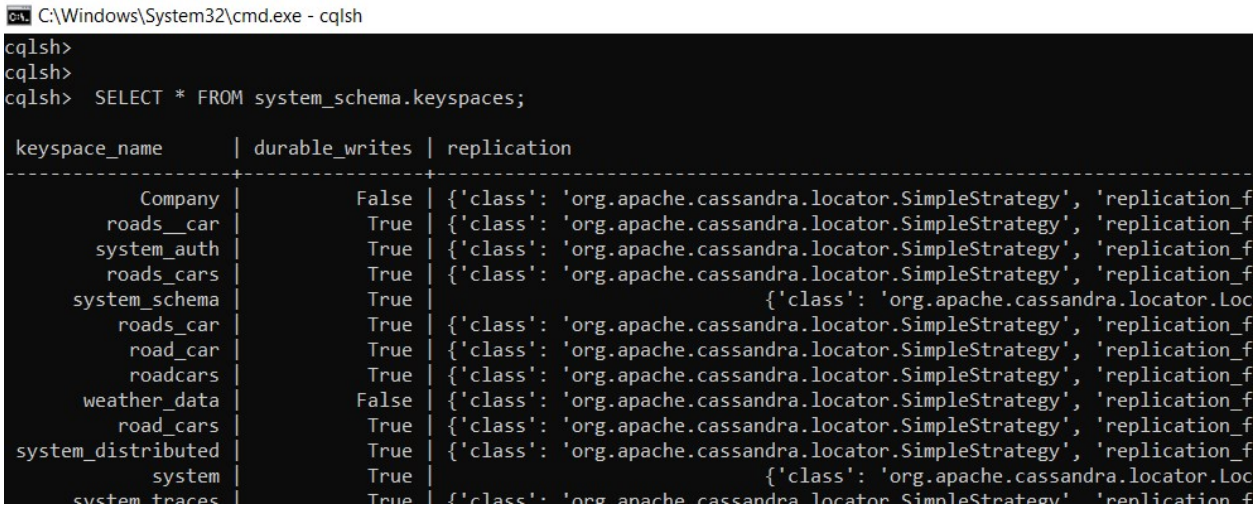
1. Create a keyspace called ‘weather_data’ with properties andwrite a query to select keypsace as ‘weather_data’.





2. Write a CQL query to verify and display keyspace.



3. Create a table called ‘weather’ with following properties such as city_id, city_name, city_cordinates (longitude, latitude), date, time, temperature, Humidity, Rainfall, Wind Speed, and Wind Direction.

C:\Windows\System32\cmd.exe - cqlsh

```
cqlsh> USE weather_data;
cqlsh:weather_data> CREATE TABLE weather(
                ... city_id int PRIMARY KEY,
                ... city_name varchar,
                ... temp int,
                ... humidity int,
                ... rainfall int,
                ... wind_speed int,
                ... wind_direction int);
cqlsh:weather_data> select * from weather;

 city_id | city_name | humidity | rainfall | temp | wind_direction | wind_speed
---------+-----------+----------+----------+------+----------------+------------

(0 rows)
```

4. Write a CQL query to perform insertion of data into table “weather”.

```
(0 rows)
cqlsh:weather_data> INSERT INTO weather_data.weather (city_id , city_name , humidity , rainfall , temp , wind_direction , wind_speed) VALUES ( 1 ,'cbe', 31 , 20 , 
InvalidRequest: Error from server: code=2200 [Invalid query] message="Invalid STRING constant (south) for "wind_direction" of type int"
cqlsh:weather_data>  INSERT INTO weather_data.weather (city_id , city_name , humidity , rainfall , temp , wind_speed , wind_direction) VALUES ( 1 ,'cbe', 31 , 20 ,
cqlsh:weather_data>  INSERT INTO weather_data.weather (city_id , city_name , humidity , rainfall , temp , wind_speed , wind_direction) VALUES ( 5 ,'pune', 25 , 34 
cqlsh:weather_data>  INSERT INTO weather_data.weather (city_id , city_name , humidity , rainfall , temp , wind_speed , wind_direction) VALUES ( 2 ,'vijayawada', 45
cqlsh:weather_data>
```

5. Write a CQL query to display all the data in the weather table.

C:\Windows\System32\cmd.exe - cqlsh

```
cqlsh:weather_data>
cqlsh:weather_data> select * from weather;

 city_id | city_name  | humidity | rainfall | temp | wind_direction | wind_speed
---------+------------+----------+----------+------+----------------+------------
       5 |       pune |       25 |       34 |   23 |              2 |         45
       1 |        cbe |       31 |       20 |   35 |              1 |         50
       2 | vijayawada |       45 |       12 |   31 |              3 |         40

(3 rows)
cqlsh:weather_data>
```

C:\Windows\System32\cmd.exe - cqlsh

```
(3 rows)
cqlsh:weather_data>  INSERT INTO weather_data.weather (city_id , city_name , humidity , rainfall , temp , wind_speed , wind_direction) VALUES ( 3 ,'vijayaw
cqlsh:weather_data> select * from weather;

 city_id | city_name  | humidity | rainfall | temp | wind_direction | wind_speed
---------+------------+----------+----------+------+----------------+------------
       5 |       pune |       25 |       34 |   23 |              2 |         45
       1 |        cbe |       31 |       20 |   35 |              1 |         50
       2 | vijayawada |       45 |       12 |   31 |              3 |         40
       3 | vijayawada |       40 |       12 |   40 |              3 |         41

(4 rows)
```

6. Write a CQL query to update the temperature where city_name =”cbe”.

Select C:\Windows\System32\cmd.exe - cqlsh

```
cqlsh:weather_data> Update weather_data.weather set temp=36 where city_id=1;
cqlsh:weather_data>  select * from weather;

 city_id | city_name  | humidity | rainfall | temp | wind_direction | wind_speed
---------+------------+----------+----------+------+----------------+------------
       5 |       pune |       25 |       34 |   23 |              2 |         45
       1 |        cbe |       31 |       20 |   36 |              1 |         50
       2 | vijayawada |       45 |       12 |   31 |              3 |         40
       3 | vijayawada |       40 |       12 |   40 |              3 |         41

(4 rows)
```

7. Write a CQL query to delete the data where city_id=5.

```
cqlsh:weather_data>
cqlsh:weather_data>  DELETE city_name , humidity , rainfall , temp , wind_speed , wind_direction from weather_data.weather where city_id=5;
cqlsh:weather_data> select * from weather;

 city_id | city_name  | humidity | rainfall | temp | wind_direction | wind_speed
---------+------------+----------+----------+------+----------------+------------
       5 |       null |     null |     null | null |           null |       null
       1 |        cbe |       31 |       20 |   36 |              1 |         50
       2 | vijayawada |       45 |       12 |   31 |              3 |         40
       3 | vijayawada |       40 |       12 |   40 |              3 |         41

(4 rows)
```

8. CQL Querying:

§ Find the city which has maximum temperature in a day.

C:\Windows\System32\cmd.exe - cqlsh

```
(4 rows)
cqlsh:weather_data> SELECT MAX(temp) FROM weather_data.weather ;

 system.max(temp)
------------------
               40

(1 rows)

Warnings :
Aggregation query used without partition key
```

§ Find the average rainfall for the particular city.

C:\Windows\System32\cmd.exe - cqlsh

```
(1 rows)
cqlsh:weather_data>  SELECT AVG(rainfall) FROM weather_data.weather where city_name='vijayawada';
InvalidRequest: Error from server: code=2200 [Invalid query] message="Cannot execute this query as it might involve data filtering and thus may have unpredictable performa
espite the performance unpredictability, use ALLOW FILTERING"
```

```
cqlsh:weather_data> SELECT AVG(rainfall) FROM weather_data.weather ;

 system.avg(rainfall)
----------------------
                   14

(1 rows)
```