Name   : Rajkumar B L
Reg.No : 2047120
Course : MCS NoSQL (LAB 07)

Cassandra Collections:

Set:

Syntax:

```
Create table table_name
(
id int,
Name text,
Email set<text>,
Primary key(id)
);
```

```
Terminal    +                                                    📢 ⛶ ⚙

cqlsh:crs> create table members(
        ... id int PRIMARY KEY,
        ... Name text,
        ... Age int,
        ... Occupation text,
        ... Email set<text>);
cqlsh:crs>
```

```
Terminal    +                                                    📢 ⛶ ⚙

cqlsh:crs> insert into members (id,Name,Age,Occupation,Email)
        ... values (1,'Raj',21,'Student',{'raj@gmail.com', 'kumar@christ.in'});
cqlsh:crs> insert into members (id,Name,Age,Occupation,Email)
        ... values (2,'Hareesma',22,'Doctor',{'hari@cra.ca'});
cqlsh:crs> insert into members (id,Name,Age,Occupation,Email)
        ... values (3,'Rohin',23,'Engineer',{'rohin@gmail.in', 'lingam@river.in'});
cqlsh:crs> select * from members;

 id | age | email                                    | name     | occupation
----+-----+------------------------------------------+----------+------------
  1 |  21 |   {'kumar@christ.in', 'raj@gmail.com'} |      Raj |    Student
  2 |  22 |                          {'hari@cra.ca'} | Hareesma |     Doctor
  3 |  23 | {'lingam@river.in', 'rohin@gmail.in'} |    Rohin |   Engineer

(3 rows)
cqlsh:crs>
```

List:

```
Terminal                                                          📢 ⤢ ⚙

cqlsh:crs> ALTER TABLE members
       ... add PhoneNumbers list<text>;
cqlsh:crs>
```

```
Terminal                                                          📢 ⤢ ⚙

cqlsh:crs> UPDATE members
       ... SET PhoneNumbers=['9361048881','7356423544']
       ... WHERE id=1;
cqlsh:crs> UPDATE members
       ... SET PhoneNumbers=['9360207649','8959171269']
       ... WHERE id=2;
cqlsh:crs>  UPDATE members
       ... SET PhoneNumbers=['7597427398']
       ... WHERE id=3;
cqlsh:crs> select * from members;

 id | age | email                                    | name     | occupation | phonenumbers
----+-----+------------------------------------------+----------+------------+---------------------------------
  1 |  21 |    {'kumar@christ.in', 'raj@gmail.com'} |      Raj |    Student | ['9361048881', '7356423544']
  2 |  22 |                        {'hari@cra.ca'} | Hareesma |     Doctor | ['9360207649', '8959171269']
  3 |  23 | {'lingam@river.in', 'rohin@gmail.in'} |    Rohin |   Engineer |              ['7597427398']

(3 rows)
cqlsh:crs> ▯
```

Map:

```
Terminal                                                          📢 ⤢ ⚙
cqlsh:crs> ALTER TABLE members   add Booking map<text,int>;
```

```
Terminal                                                          📢 ⤢ ⚙
cqlsh:crs> UPDATE members
       ... SET Booking={'CarID':101,'Cost':10000}
       ... WHERE id=3;
cqlsh:crs> select * from members;

 id | age | booking                    | email                                    | name     | occupation | phonenumbers
----+-----+----------------------------+------------------------------------------+----------+------------+------------------------------
  1 |  21 |                      null |    {'kumar@christ.in', 'raj@gmail.com'} |      Raj |    Student | ['9361048881', '7356423544']
  2 |  22 |                      null |                        {'hari@cra.ca'} | Hareesma |     Doctor | ['9360207649', '8959171269']
  3 |  23 | {'CarID': 101, 'Cost': 10000} | {'lingam@river.in', 'rohin@gmail.in'} |    Rohin |   Engineer |              ['7597427398']

(3 rows)
cqlsh:crs> ▯
```

Export Data to CSV File:

```
Terminal  +                                                    ⊠ ✕ ✿
cqlsh:crs> Copy members(id,Name,Age,Occupation,Email,PhoneNumbers,Booking)
       ... TO 'blraj\Desktop\Members_Data.csv' WITH HEADER = TRUE;
Using 1 child processes

Starting copy of crs.members with columns [id, name, age, occupation, email, phonenumbers, booking].
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
cqlshlib.copyutil.ExportProcess.write_rows_to_csv(): writing row
Processed: 3 rows; Rate:       6 rows/s; Avg. rate:       6 rows/s
3 rows exported to 1 files in 0.470 seconds.
cqlsh:crs> []
```

Import Data From CSV File:

```
Terminal  +                                                    ⊠ ✕ ✿
cqlsh:crs> select * from members;
 id | age | booking | email | name | occupation | phonenumbers
----+-----+---------+-------+------+------------+--------------

(0 rows)
cqlsh:crs> Copy members(id,Name,Age,Occupation,Email,PhoneNumbers,Booking)
       ... FROM 'blraj\Desktop\Members_Data.csv' WITH HEADER = TRUE;
  Using 1 child processes

Starting copy of crs.members with columns [id, name, age, occupation, email, phonenumbers, booking].
Processed: 3 rows; Rate:       6 rows/s; Avg. rate:       8 rows/s
3 rows imported from 1 files in 0.371 seconds (0 skipped).
cqlsh:crs> select * from members;
 id | age | booking                    | email                              | name     | occup
ation | phonenumbers
----+-----+----------------------------+------------------------------------+----------+------
------+---------------------------
  1 |  21 |                       null | {'kumar@christ.in', 'raj@gmail.com'} |      Raj |    St
udent | ['9361048881', '7356423544']
  2 |  22 |                       null |                {'hari@cra.ca'} | Hareesma |     D
octor | ['9360207649', '8959171269']
  3 |  23 | {'CarID': 101, 'Cost': 10000} | {'lingam@river.in', 'rohin@gmail.in'} |    Rohin |   Eng
ineer |            ['7597427398']

(3 rows)
cqlsh:crs> []
```