ASSIGNMENT

create keyspace assignment with replication = {'class':'SimpleStrategy','replication_factor':1};

use assignment;

1. Write new driver details for registration, ensuring that the driver name does not exist.

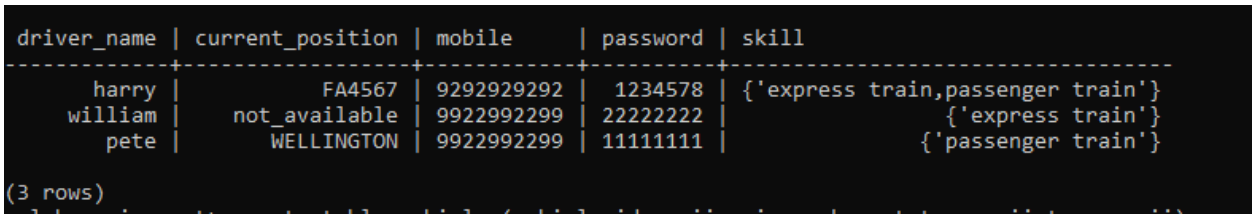
create table driver(driver_name text primary key,password ascii,mobile bigint,current_position text,skill set<text>);

insert into driver(driver_name,password,mobile,current_position,skill) values('harry','1234578',9292929292,'FA4567',{'express train,passenger train'});

insert into driver(driver_name,password,mobile,current_position,skill) values('pete','11111111',9922992299,'WELLINGTON',{'passenger train'});

insert into driver(driver_name,password,mobile,current_position,skill) values('william','22222222',9922992299,'not_available',{'express train'});

select * from driver;



```
 driver_name | current_position | mobile     | password | skill
-------------+------------------+------------+----------+-----------------------------------
       harry |           FA4567 | 9292929292 |  1234578 | {'express train,passenger train'}
     william |    not_available | 9922992299 | 22222222 |                {'express train'}
        pete |       WELLINGTON | 9922992299 | 11111111 |              {'passenger train'}

(3 rows)
```

2. Change the password of a driver, ensuring that the current password matches what is in the
database.

update driver set password = '12111211' where driver_name='pete' IF password = ‘11111111';

```
 [applied]
-----------
      True

cqlsh:assignment> select * from driver;

 driver_name | current_position | mobile     | password | skill
-------------+------------------+------------+----------+---------------------------------
       harry |           FA4567 | 9292929292 |  1234578 | {'express train,passenger train'}
     william |    not_available | 9922992299 | 22222222 |                {'express train'}
        pete |       WELLINGTON | 9922992299 | 12111211 |               {'passenger train'}

(3 rows)
```

3. Update the current position of a driver.

update driver set current_position = 'FB5566' where driver_name = 'william';

```
cqlsh:assignment> select * from driver;

 driver_name | current_position | mobile     | password | skill
-------------+------------------+------------+----------+---------------------------------
       harry |           FA4567 | 9292929292 |  1234578 | {'express train,passenger train'}
     william |           FB5566 | 9922992299 | 22222222 |                {'express train'}
        pete |       WELLINGTON | 9922992299 | 12111211 |               {'passenger train'}

(3 rows)
```

4. Update the set of skills of a driver.

update driver set skill = {'express train'} where driver_name = 'pete';

```
cqlsh:assignment> select * from driver;

 driver_name | current_position | mobile     | password | skill
-------------+------------------+------------+----------+---------------------------------
       harry |           FA4567 | 9292929292 |  1234578 | {'express train,passenger train'}
     william |           FB5566 | 9922992299 | 22222222 |                {'express train'}
        pete |       WELLINGTON | 9922992299 | 12111211 |                {'express train'}

(3 rows)
```

5. Update the number of days at work per month for a driver.

update data_point set day=5 where sequence='2020-03-10';

```
cqlsh:assignment> select * from data_point;

 sequence                         | day | latitude | longitude | speed
----------------------------------+-----+----------+-----------+-------
 2020-04-11 18:30:00.000000+0000 |   2 |     65.6 |      68.5 |    56
 2020-03-09 18:30:00.000000+0000 |   5 |     59.5 |      61.5 |    76
 2020-06-14 18:30:00.000000+0000 |   1 |     66.6 |      78.5 |    98

(3 rows)
```

6. Write new vehicle details.

create table vehicles(vehicle_id ascii primary key,status ascii,type ascii);

insert into vehicles(vehicle_id,status,type)
values('KA23456','Maintenance','Gulliver');

insert into vehicles(vehicle_id,status,type) values('KA23786','Upper Hutt','Ganz Mavag');

insert into vehicles(vehicle_id,status,type) values('KA35786','out_of_order','Kiwi Rail');

select * from vehicles;

```
 vehicle_id | status       | type
------------+--------------+------------
    KA35786 | out_of_order |  Kiwi Rail
    KA23786 |   Upper Hutt | Ganz Mavag
    KA23456 |  Maintenance |   Gulliver
```

7. Update the status of a vehicle.

update vehicles set status = 'Maintenance' where vehicle_id = 'KA35786';

```
cqlsh:assignment> select * from vehicles;

 vehicle_id | status      | type
------------+-------------+------------
    KA35786 | Maintenance |  Kiwi Rail
    KA23786 |  Upper Hutt | Ganz Mavag
    KA23456 | Maintenance |   Gulliver

(3 rows)
```

8. Increment the daily distance for a vehicle.

No daily distance column for vehicle

9. Increment the total distance for a vehicle.

create table vehicle_usage(vehicle_id text,total_distance counter,primary key(vehicle_id));

update vehicle_usage set total_distance=total_distance+100 where vehicle_id='KA35786';

update vehicle_usage set total_distance=total_distance+250 where vehicle_id='KA23786';

update vehicle_usage set total_distance=total_distance+300 where vehicle_id='KA23456';

select * from vehicle_usage;

```
cqlsh:assignment> select * from vehicle_usage;

 vehicle_id | total_distance
------------+----------------
    KA35786 |            101
    KA23786 |            252
    KA23456 |            301

(3 rows)
```

update vehicle_usage set total_distance = total_distance + 7 where vehicle_id = 'KA23786';

```
cqlsh:assignment> select * from vehicle_usage;

 vehicle_id | total_distance
------------+----------------
    KA35786 |            101
    KA23786 |            259
    KA23456 |            301

(3 rows)
```

10. Write the train time table.

create table time_table(line_name ascii primary key,service_no bigint,station_name text, latitude double,longitude double,time int,distance double);

insert into time_table (line_name, service_no, station_name, latitude, longitude, time, distance)
values('LINE1',3245,'marathalli',57.30,60.40,1530,335);

insert into time_table (line_name, service_no, station_name, latitude, longitude, time, distance) values('LINE2',4323,'white field',55.30,32.40,1430,400);

insert into time_table (line_name, service_no, station_name, latitude, longitude, time, distance) values('LINE3',2321,'mg road',42.20,90.40,1604,300);

```
cqlsh:assignment> select * from time_table;

 line_name | distance | latitude | longitude | service_no | station_name | time
-----------+----------+----------+-----------+------------+--------------+------
     LINE2 |      400 |     55.3 |      32.4 |       4323 |  white field | 1430
     LINE3 |      300 |     42.2 |      90.4 |       2321 |      mg road | 1604
     LINE1 |      335 |     57.3 |      60.4 |       3245 |   marathalli | 1530

(3 rows)
```

11. Write a departure station with time and service identification (line_name, service_no).

insert into time_table (line_name, service_no, station_name, latitude, longitude, time, distance) values('LINE4',1231,'departure station',42.20,90.40,1604,300);

```
cqlsh:assignment> select * from time_table;

 line_name | distance | latitude | longitude | service_no | station_name      | time
-----------+----------+----------+-----------+------------+-------------------+------
     LINE2 |      400 |     55.3 |      32.4 |       4323 |       white field | 1430
     LINE3 |      300 |     42.2 |      90.4 |       2321 |           mg road | 1604
     LINE4 |      300 |     42.2 |      90.4 |       1231 | departure station | 1604
     LINE1 |      335 |     57.3 |      60.4 |       3245 |        marathalli | 1530

(4 rows)
```

12. Write a data point for a service.

create table data_point(day int,sequence timestamp primary key,latitude double,longitude double,speed double);

insert into data_point(day,sequence,latitude,longitude,speed) values(14,'2020-03-10',59.50,61.50,76);

insert into data_point(day,sequence,latitude,longitude,speed) values(2,'2020-04-12',65.60,68.50,56);

insert into data_point(day,sequence,latitude,longitude,speed) values(1,'2020-06-15',66.60,78.50,98);

select * from data_point;

```
 sequence                         | day | latitude | longitude | speed
----------------------------------+-----+----------+-----------+-------
 2020-04-11 18:30:00.000000+0000 |   2 |     65.6 |      68.5 |    56
 2020-03-09 18:30:00.000000+0000 |  14 |     59.5 |      61.5 |    76
 2020-06-14 18:30:00.000000+0000 |   1 |     66.6 |      78.5 |    98

(3 rows)
```