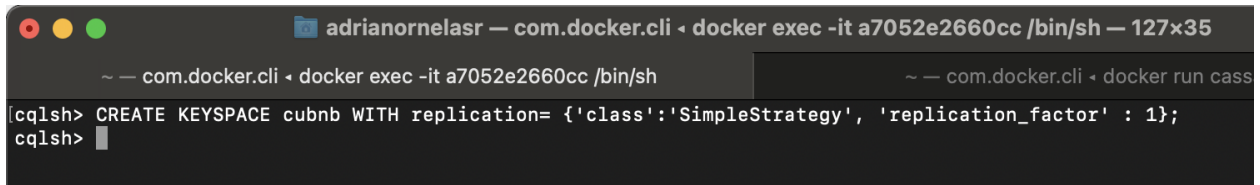


## SECTION 1:

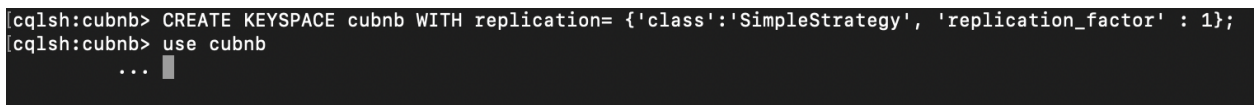
1)

```
CREATE KEYSPACE cubnb WITH replication= {'class':'SimpleStrategy', 'replication_factor' : 1};
```

A terminal window with a dark background. The title bar shows 'adrianornelasr — com.docker.cli • docker exec -it a7052e2660cc /bin/sh — 127x35'. The prompt is '~ — com.docker.cli • docker exec -it a7052e2660cc /bin/sh'. The command 'cqlsh> CREATE KEYSPACE cubnb WITH replication= {'class':'SimpleStrategy', 'replication\_factor' : 1};' is entered and executed, followed by a new prompt 'cqlsh> '.

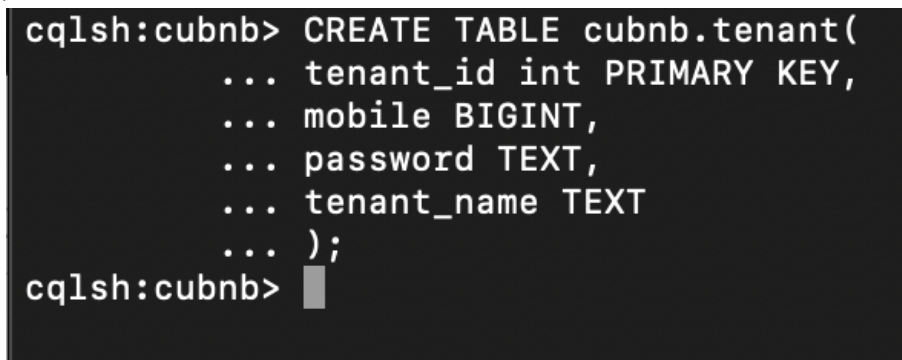
2)

```
USE cubnb;
```

A terminal window with a dark background. The title bar shows 'adrianornelasr — com.docker.cli • docker exec -it a7052e2660cc /bin/sh — 127x35'. The prompt is '~ — com.docker.cli • docker exec -it a7052e2660cc /bin/sh'. The command 'cqlsh> CREATE KEYSPACE cubnb WITH replication= {'class':'SimpleStrategy', 'replication\_factor' : 1};' is entered and executed. Then, 'cqlsh:cubnb> use cubnb' is entered and executed, followed by 'cqlsh:cubnb> ...' and a new prompt 'cqlsh:cubnb> '.

3)

```
CREATE TABLE cubnb.tenant(  
    tenant_id int PRIMARY KEY,  
    mobile BIGINT,  
    password TEXT,  
    tenant_name TEXT  
);
```

A terminal window with a dark background. The title bar shows 'adrianornelasr — com.docker.cli • docker exec -it a7052e2660cc /bin/sh — 127x35'. The prompt is '~ — com.docker.cli • docker exec -it a7052e2660cc /bin/sh'. The command 'cqlsh:cubnb> CREATE TABLE cubnb.tenant(' is entered and executed, followed by '... tenant\_id int PRIMARY KEY,', '... mobile BIGINT,', '... password TEXT,', '... tenant\_name TEXT', '... );', and a new prompt 'cqlsh:cubnb> '.

4)

```
CREATE TABLE cubnb.property(  
    property_id int,  
    property_name TEXT,  
    host_id int,  
    location TEXT,  
    type TEXT,  
    price INT,  
    number_of_rooms INT,  
    max_occupancy INT,  
    number_of_reviews INT,  
    amenities set<TEXT>,  
    status TEXT,  
    primary key(property_id, host_id)
```

);

```
cqlsh:cubnb> CREATE TABLE cubnb.property(  
... property_id int,  
... property_name TEXT,  
... host_id int,  
... location TEXT,  
... type TEXT,  
... price INT,  
... number_of_rooms INT,  
... max_occupancy INT,  
... number_of_reviews INT,  
... amenities varchar,  
... status TEXT,  
... primary key(property_id, host_id)  
... );  
cqlsh:cubnb>
```

5)

```
CREATE TABLE cubnb.booking(  
    booking_id int,  
    property_id int,  
    total_occupancy int,  
    tenant_id int,  
    status TEXT,  
    no_of_days int,  
    start_date DATE,  
    end_date DATE,  
    primary key(booking_id, property_id, tenant_id)
```

);

```
cqlsh:cubnb> CREATE TABLE cubnb.booking(  
... booking_id int,  
... property_id int,  
... total_occupancy int,  
... tenant_id int,  
... status TEXT,  
... no_of_days int,  
... start_date DATE,  
... end_date DATE,  
... primary key(booking_id, property_id, tenant_id)  
... );  
cqlsh:cubnb>
```

---

Put cubnb-dataset.text

```
cqlsh:cubnb>
cqlsh:cubnb> select count(*) from cubnb.property;

count
-----
    200

(1 rows)

Warnings :
Aggregation query used without partition key

cqlsh:cubnb> select count(*) from cubnb.booking;

count
-----
   1500

(1 rows)

Warnings :
Aggregation query used without partition key

cqlsh:cubnb> select count(*) from cubnb.tenant;

count
-----
    100

(1 rows)

Warnings :
Aggregation query used without partition key

cqlsh:cubnb>
```

---

## SECTION 2

1. Get the booking\_id, property\_id, tenant\_id, and number of days a property is booked in the month of Feb '2022 for tenant-id 80855.

```
SELECT booking_id, property_id, tenant_id, no_of_days
FROM cubnb.booking
WHERE tenant_id=80855 AND
      start_date >= '2022-02-01' AND start_date <= '2022-02-28'
ALLOW FILTERING;
```

```
cqlsh:cubnb> SELECT booking_id, property_id, tenant_id, no_of_days
... FROM cubnb.booking
... WHERE tenant_id=80855 AND
...   start_date >= '2022-02-01' AND start_date <= '2022-02-28'
... ALLOW FILTERING;
```

| booking_id | property_id | tenant_id | no_of_days |
|------------|-------------|-----------|------------|
| 2471       | 72          | 80855     | 1          |
| 1332       | 133         | 80855     | 15         |
| 1753       | 154         | 80855     | 30         |
| 2678       | 79          | 80855     | 2          |
| 2252       | 53          | 80855     | 14         |
| 1441       | 42          | 80855     | 30         |

(6 rows)  
cqlsh:cubnb> █

2. Get the count of properties whose reviews are more than 200.

```
SELECT COUNT(*) FROM cubnb.property WHERE number_of_reviews > 200 ALLOW FILTERING;
```

```
[cqlsh:cubnb> SELECT COUNT(*) FROM cubnb.property WHERE number_of_reviews > 200 ALLOW FILTERING;
```

| count |
|-------|
| 45    |

(1 rows)

Warnings :  
Aggregation query used without partition key

3. List all properties from “Brooklyn” location with type as apartment and have status as available.

```
SELECT property_id, property_name
... FROM cubnb.property
... WHERE location = 'Brooklyn' AND status = 'available' AND type = 'Apartment'
... ALLOW FILTERING;
```

```

[cqlsh:cubnb> SELECT property_id, property_name
... FROM cubnb.property
... WHERE location = 'Brooklyn' AND status = 'available' AND type = 'Apartment'
... ALLOW FILTERING;

```

| property_id | property_name                          |
|-------------|--|
| 144         | Fully Furnished Basement Apartment     |
| 140         | Huge Private Floor at The Waverly      |
| 94          | 2-bed brownstone duplex + garden       |
| 152         | Lg Rm in Historic Prospect Heights     |
| 54          | Greenpoint Place...Has It All!         |
| 75          | BLUE TRIM GUEST HOUSE                  |
| 179         | Greenwich Village Stylish Apartment    |
| 196         | Prime Location in Manhattan            |
| 25          | MAISON DES SIRENES1,bohemian apartment |

(9 rows)

cqlsh:cubnb>

4.

- a) Get all the properties which are handled by host\_id 1029.

```

SELECT property_id, property_name
... FROM cubnb.property
... WHERE host_id = 1029
... ALLOW FILTERING;

```

```

[cqlsh:cubnb> SELECT property_id, property_name
... FROM cubnb.property
... WHERE host_id = 1029
... ALLOW FILTERING;

```

| property_id | property_name                                      |
|-------------|--|
| 46          | Entire apartment in central Brooklyn neighborhood. |
| 8           | Large Furnished Room Near Bway                     |
| 122         | 3 Story Town House in Park Slope                   |
| 7           | BlissArtsSpace!                                    |
| 97          | Light-filled classic Central Park                  |
| 165         | Charming and Cozy midtown loft any WEEK ENDS !!!   |

(6 rows)

cqlsh:cubnb>

- b) Add new amenity 'Heater' to the above results(in a single query).

```

UPDATE cubnb.property SET amenities = amenities + {'Heater'} WHERE property_id in (46, 8, 122, 7, 97, 165) AND host_id = 1029;

```

- c) Show the updated results from part b query.

```

cqlsh:cubnb> SELECT property_id, property_name, amenities FROM cubnb.property WHERE host_id = 1029 ALLOW FILTERING;

```

| property_id | property_name                                     | amenities   |
|-------------|---|---|
| 46          | Entire apartment in central Brooklyn neighborhood | {'Air Conditioning', 'BeachView', 'Free Parking', 'Heater', 'Microwave Oven', 'Smoke Alarm', 'Washer', 'WiFi'}  |
| 8           | Large Furnished Room Near Bway                    | {'Free Parking', 'GardenView', 'Heater', 'Microwave Oven', 'Pool', 'Smoke Alarm', 'Washer', 'WiFi'}   |
| 122         | 3 Story Town House in Park Slope                  | {'Air Conditioning', 'BeachView', 'Free Parking', 'GardenView', 'Heater', 'Microwave Oven', 'Pool', 'Security Camera', 'Smoke Alarm', 'Washer', 'WiFi'} |
| 7           | BlissArtsSpace!                                   | {'Free Parking', 'GardenView', 'Heater', 'Microwave Oven', 'Pool', 'Smoke Alarm', 'Washer', 'WiFi'}   |
| 92          | Light-filled classic Central Park                 | {'Air Conditioning', 'Free Parking', 'Heater', 'Microwave Oven', 'Security Camera', 'Smoke Alarm', 'Washer', 'WiFi'}                                    |
| 168         | Charming and Cozy midtown loft any WEEK ENDS !!!  | {'Air Conditioning', 'BeachView', 'Free Parking', 'Heater', 'Microwave Oven', 'Smoke Alarm', 'Washer', 'WiFi'}  |

```

(6 rows)
cqlsh:cubnb>

```

5.

- a) Add your details in the tenant table with tenant\_id as 3287

```

INSERT INTO cubnb.tenant(tenant_id, mobile, password, tenant_name)
VALUES (
    3287,
    3034228869,
    'passwordPlaceholder999',
    'Adrian&John'
);

```

```

cqlsh:cubnb> INSERT INTO cubnb.tenant(tenant_id, mobile, password, tenant_name)
... VALUES (
... 3287,
... 3034228869,
... 'passwordPlaceholder999',
... 'Adrian&John'
... );
cqlsh:cubnb> select * from cubnb.tenant WHERE tenant_id = 3287;

```

| tenant_id | mobile     | password               | tenant_name |
|-----------|------------|------------------------|-------------|
| 3287      | 3034228869 | passwordPlaceholder999 | Adrian&John |

```

(1 rows)

```

- b) Change the password of the tenant\_id 3287 from the existing to 'password@123' and display the change

```

UPDATE cubnb.tenant
SET password = 'password@123'
WHERE tenant_id = 3287;

```



```
[cqlsh:cubnb> select * from cubnb.tenant WHERE tenant_id = 3287;
```

| tenant_id | mobile     | password               | tenant_name |
|-----------|------------|------------------------|-------------|
| 3287      | 3034228869 | passwordPlaceholder999 | Adrian&John |

```
(1 rows)
[cqlsh:cubnb> UPDATE cubnb.tenant SET password = 'password@123' WHERE tenant_id = 3287;
[cqlsh:cubnb> select * from cubnb.tenant WHERE tenant_id = 3287;
```

| tenant_id | mobile     | password     | tenant_name |
|-----------|------------|--------------|-------------|
| 3287      | 3034228869 | password@123 | Adrian&John |

```
(1 rows)
cqlsh:cubnb>
```

6. Remove an amenity 'Garden View' for host\_id 1012 and property\_id 110 and display the results.

```
DELETE "amenities"['GardenView'] FROM cubnb.property WHERE host_id = 1012 AND property_id = 110;
cqlsh:cubnb> SELECT property_id, property_name, amenities FROM cubnb.property WHERE host_id = 1012 AND property_id = 110 ALLOW FILTERING;
```

```
[cqlsh:cubnb> DELETE "amenities"['GardenView'] FROM cubnb.property WHERE host_id = 1012 AND property_id = 110;
[cqlsh:cubnb> SELECT property_id, property_name, amenities FROM cubnb.property WHERE host_id = 1012 AND property_id = 110 ALLOW FILTERING;
```

| property_id | property_name                                      | amenities   |
|-------------|--|---|
| 110         | Sunny 2-story Brooklyn townhouse w deck and garden | ('Air Conditioning', 'BeachView', 'Free Parking', 'Microwave Oven', 'Pool', 'Security Camera', 'Smoke Alarm', 'Washer', 'WiFi') |

```
(1 rows)
cqlsh:cubnb>
```

=

7. List the properties which have a 'BeachView' in it's amenities and whose rent price is more than 1000.

```
SELECT property_id, property_name, location, type, price
FROM cubnb.property
WHERE amenities CONTAINS 'BeachView'
AND price >= 1000
ALLOW FILTERING;
```

```
cqlsh:cubnb> SELECT property_id, property_name, location, type, price
... FROM cubnb.property
... WHERE amenities CONTAINS 'BeachView'
... AND price >= 1000
... ALLOW FILTERING;
```

| property_id | property_name                                      | location  | type         | price |
|-------------|--|-----------|--------------|-------|
| 110         | Sunny 2-story Brooklyn townhouse w deck and garden | Queens    | Apartment    | 1512  |
| 135         | Most Central Location!                             | Brooklyn  | Private Room | 1042  |
| 85          | Private room Great Deal at Lower East Side         | Manhattan | Private Room | 1512  |
| 81          | Cozy 2 BR in Williamsburg                          | Queens    | Private Room | 1512  |
| 93          | Large Parlor Room, Landmark Home 1 block to PRATT  | Queens    | Private Room | 1042  |
| 163         | Private, Large and Sunny 1BR w/WandD               | Queens    | Private Room | 1512  |
| 165         | Charming and Cozy midtown loft any WEEK ENDS !!!   | Manhattan | Private Room | 1042  |

```
(7 rows)
```

8. Get the number of highest occupancy of properties for 8 rooms.

```
SELECT MAX(max_occupancy) FROM cubnb.property WHERE number_of_rooms = 8 ALLOW FILTERING;
```

```
... /
cqlsh:cubnb> SELECT MAX(max_occupancy) FROM cubnb.property WHERE number_of_rooms = 8 ALLOW FILTERING;
system.max(max_occupancy)
-----
16
```