

1. What is the time period used?

QUERY -

```
select listing_id as property,start_time,end_time,DATEDIFF(end_time,start_time)
as time_period from (select listing_id,
```

```
min(date) start_time,
```

```
max(date) end_time
```

```
from airbnb
```

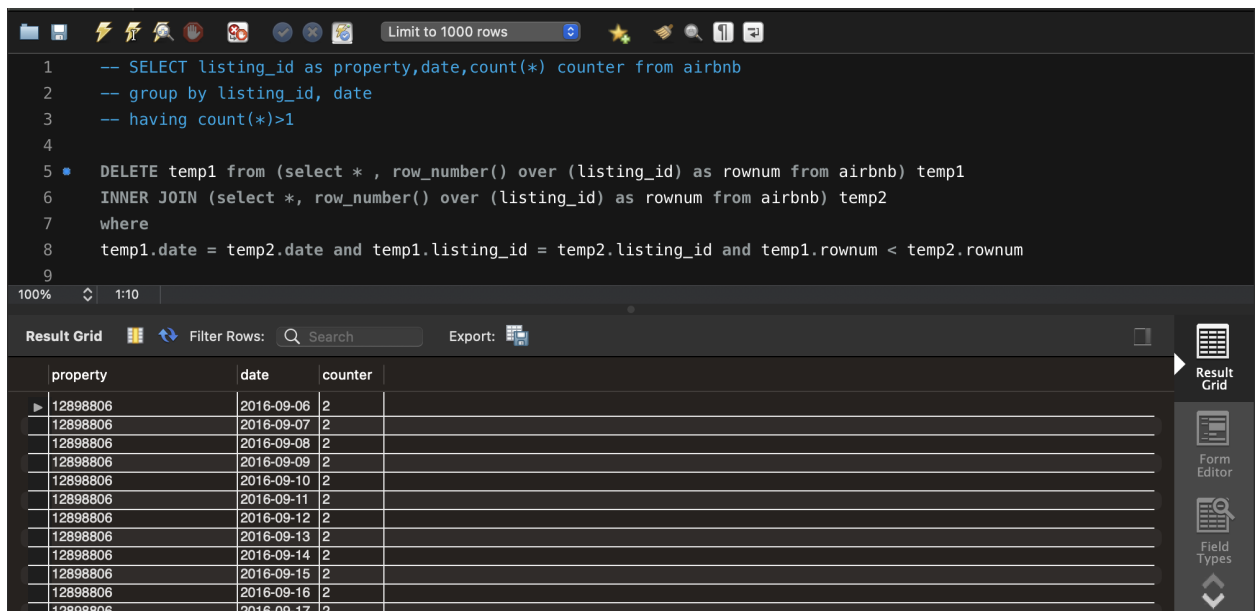
```
group by listing_id)as temp
```

	property	start_time	end_time	time_period
▶	12147973	2016-09-06	2017-09-05	364
■	3075044	2016-09-06	2017-09-05	364
■	6976	2016-09-06	2017-09-05	364
■	1436513	2016-09-06	2017-09-05	364
■	7651065	2016-09-06	2017-09-05	364
■	12386020	2016-09-06	2017-09-05	364
■	5706985	2016-09-06	2017-09-05	364
■	2843445	2016-09-06	2017-09-05	364
■	753446	2016-09-06	2017-09-05	364
■	849408	2016-09-06	2017-09-05	364
■	12023024	2016-09-06	2017-09-05	364
■	1668313	2016-09-06	2017-09-05	364

2. How many properties have duplicate entries? Remove duplicate rows (say a row appears 3 times, remove 2 and keep 1)

QUERY -

```
DELETE temp1 from (select * , row_number() over (listing_id) as rownum from
airbnb) temp1 INNER JOIN (select *, row_number() over (listing_id) as rownum
from Airbnb) temp2 where temp1.date = temp2.date and temp1.listing_id =
temp2.listing_id and temp1.rownum < temp2.rownum
```



```
1  -- SELECT listing_id as property,date,count(*) counter from Airbnb
2  -- group by listing_id, date
3  -- having count(*)>1
4
5  DELETE temp1 from (select * , row_number() over (listing_id) as rownum from Airbnb) temp1
6  INNER JOIN (select *, row_number() over (listing_id) as rownum from Airbnb) temp2
7  where
8  temp1.date = temp2.date and temp1.listing_id = temp2.listing_id and temp1.rownum < temp2.rownum
9
```

property	date	counter
12898806	2016-09-06	2
12898806	2016-09-07	2
12898806	2016-09-08	2
12898806	2016-09-09	2
12898806	2016-09-10	2
12898806	2016-09-11	2
12898806	2016-09-12	2
12898806	2016-09-13	2
12898806	2016-09-14	2
12898806	2016-09-15	2
12898806	2016-09-16	2
12898806	2016-09-17	2

3. For each property, find out the number of days the property was available and not available (create a table with listing_id, available days, unavailable days and available days as a fraction of total days)

QUERY -

```
select listing_id as property,SUM(CASE WHEN available = 't' THEN 1 ELSE 0
END) AS Available,
SUM(CASE WHEN available = 'f' THEN 1 ELSE 0 END) AS Unavailable
from Airbnb
```

```
group by listing_id
```

	property	Available	Unavailable	
▶	12147973	0	365	
	3075044	359	6	
	6976	319	46	
	1436513	98	267	
	7651065	334	31	
	12386020	58	307	
	5706985	344	21	
	2843445	365	0	
	753446	347	18	
	849408	107	258	
	12023024	343	22	
	1668313	341	24	
	2684840	0	365	

4. How many properties were available on more than 50% of the days? How many properties were available on more than 75% of the days?

QUERY -

(A)

```
select count(property) as fifty_percent from (select listing_id as
property, SUM(CASE WHEN available = 't' THEN 1 ELSE 0 END) AS Available,
SUM(CASE WHEN available = 'f' THEN 1 ELSE 0 END) AS Unavailable from
airbnb
group by listing_id) as temp
```

where available>183

fifty_percent
1729

(B)

select count(property) as seventy_five_percent from(select listing_id as
property,SUM(CASE WHEN available = 't' THEN 1 ELSE 0 END) AS Available,

SUM(CASE WHEN available = 'f' THEN 1 ELSE 0 END) AS Unavailable from
airbnb

group by listing_id) as temp

where available>273

seventy_five_percent
1429

5. Create a table with max, min and average price of each property

QUERY -

Create Table Ques5

(property int,

maxprice float,

minprice float,

avgprice float);

INSERT INTO Ques5

SELECT LISTING_ID AS PROPERTY,MAX(NEW_PRICE) AS MAXPRICE,
MIN(NEW_PRICE) AS MINPRICE, AVG(NEW_PRICE) AS AVGPRICE

FROM airbnb

GROUP BY LISTING_ID

The screenshot shows a database IDE with a dark theme. The top pane contains SQL code for creating a table and inserting data. The bottom pane shows a 'Result Grid' with 14 rows of data. The columns are 'property', 'maxprice', 'minprice', and 'avgprice'. The data is as follows:

property	maxprice	minprice	avgprice
12147973	0	0	0
3075044	75	0	66.6986
6976	65	0	56.8082
1436513	75	0	20.137
7651065	79	0	72.2904
12386020	75	0	11.9178
5706985	200	0	105.326
2843445	75	75	75
753446	69	0	56.4356
849408	309	0	74.1452
12023024	60	0	51.0384
1668313	57	0	53.2521

6. Extract properties with an average price of more than \$500

QUERY -

SELECT LISTING_ID as Property,avg(new_price) as Price FROM airbnb

GROUP BY LISTING_ID

HAVING AVG(NEW_PRICE)>500

	Property	Price	
▶	3881993	506.7123	
	743211	521.5753	
	50032	653.4932	
	14813006	539.2603	
	13918656	508.1644	
	5783197	560.2740	
	8303267	1573.4247	
	6972426	551.3699	
	1810397	732.0548	
	7740592	703.2877	
	1214214	520.0000	
	2277821	573.6603	
	2881388	726.1479	
	9231486	608.2548	
	7853079	500.6849	
	3673688	699.0000	
	7109689	557.2603	
	11521541	650.1918	
	6627802	1000.0000	