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Employment id :TAS063

<u>SQL assignment:</u>

(f and t mean false and true, respectively)

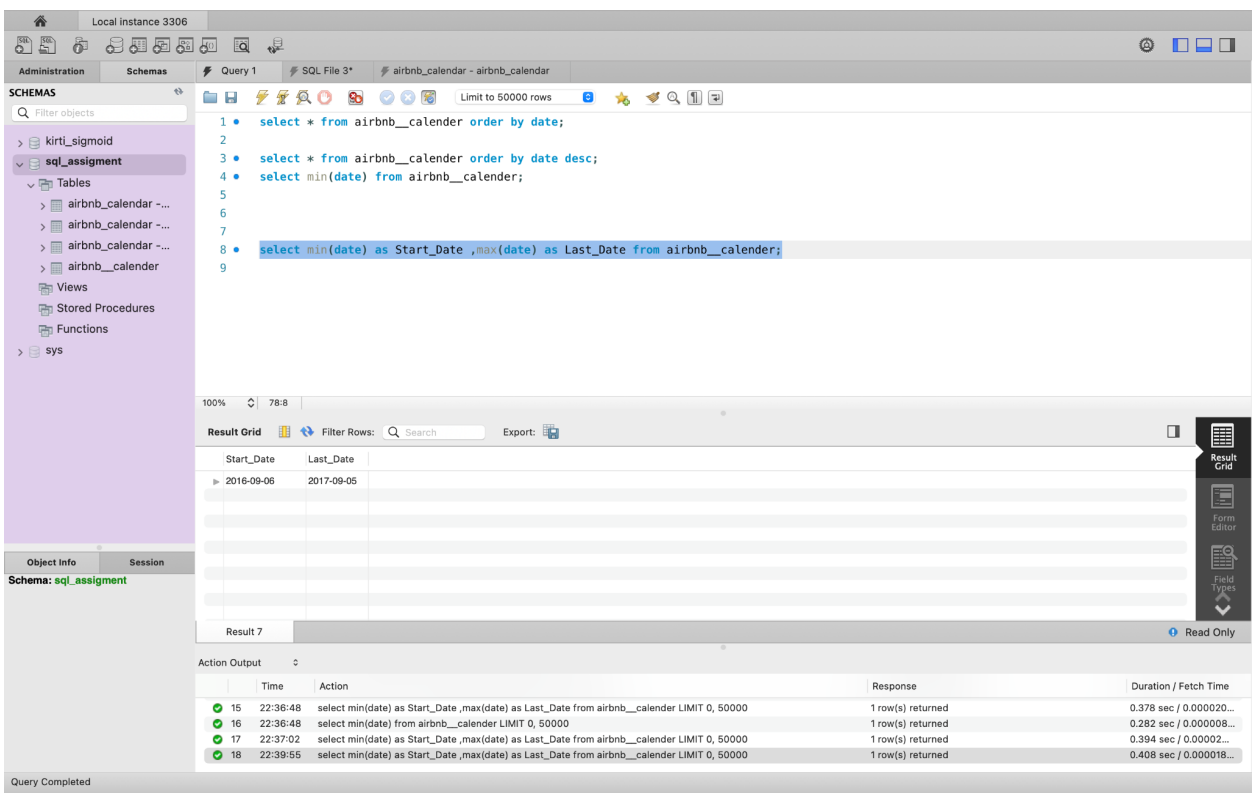
Please share query and output for each:

Questions:

What is the time period used?

Earliest date of this dataset is 2016-09-06 and the latest date of this dataset is 2016-09-06, So the time period range is 2016-09-06 to 2016-09-06

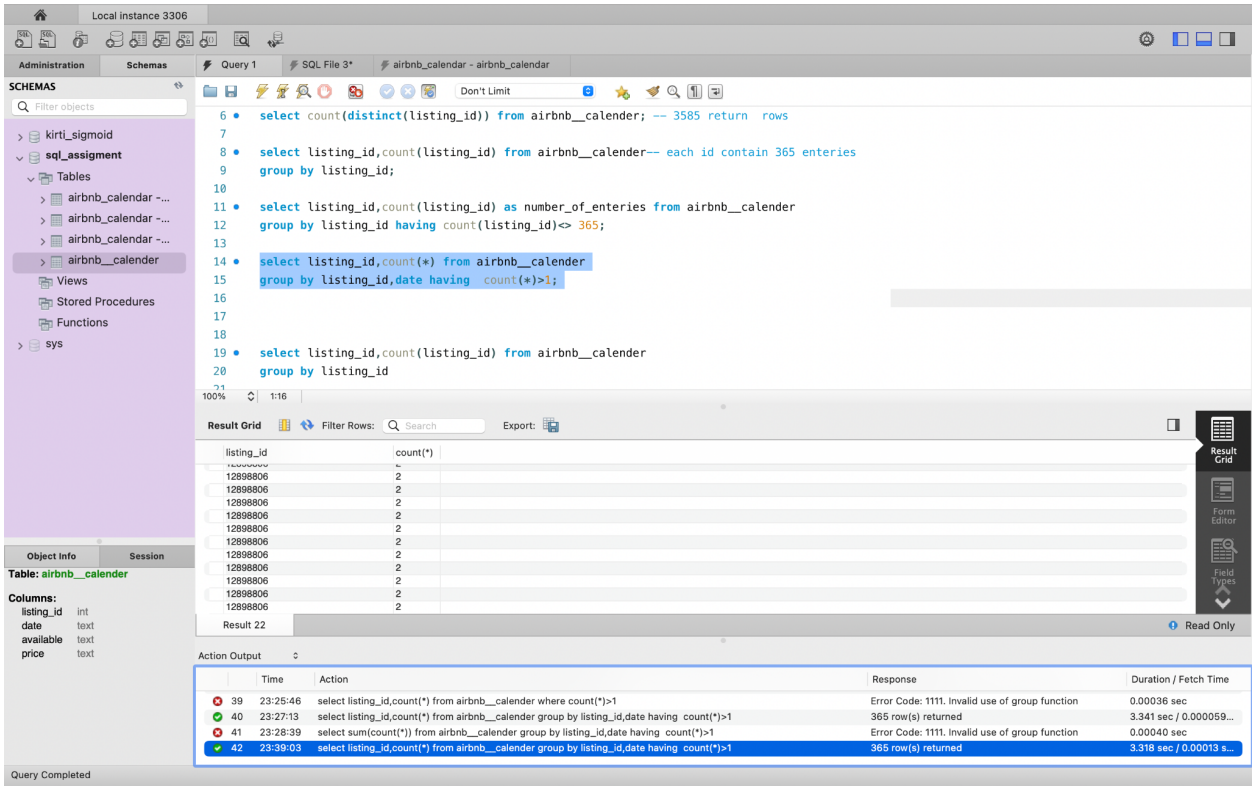
select min(date) as Start_Date ,max(date) as Last_Date from airbnb__calender;



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

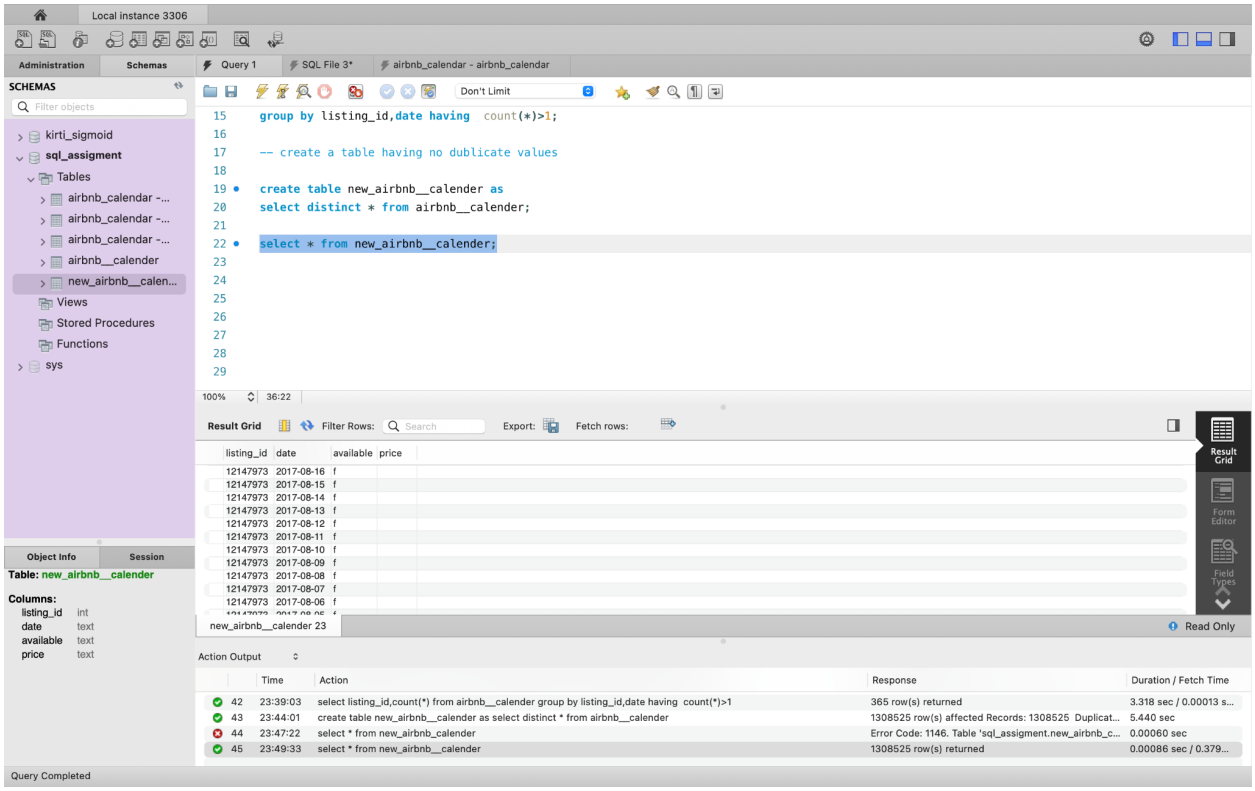
We use count(*) to return the number of rows in a specified table In this database we have two attribute which together have distinct value in each row, so by using count(*) we can know how many rows appear duplicate.

```
select listing_id,count(*) from airbnb__calender
group by listing_id,date having  count(*)>1;
```



Create new table having no duplicate values:

```
create table new_airbnb__calender as
select distinct * from airbnb__calender;
```



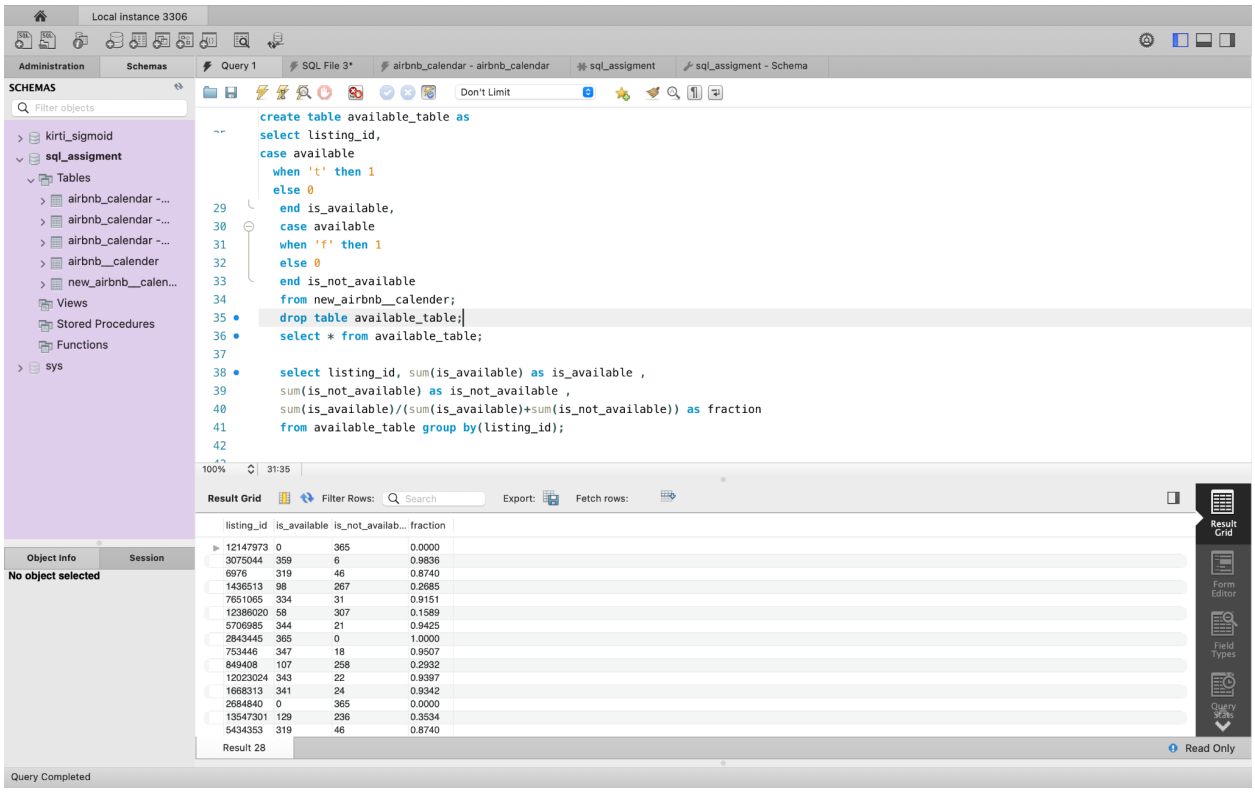
1. For each property, find out the number of days the property was available and not available (create a table with listing_id, available days, unavailable days and available days as a fraction of total days)

   Create a table with store availability or not availability of the property

```
create table available_table as
select listing_id,
case available
  when 't' then 1
  else 0
   end is_available,
   case available
   when 'f' then 1
   else 0
   end is_not_available
   from new_airbnb__calender;
```

   By querying we can get the number of days property was available or not

```
select listing_id, sum(is_available) as is_available ,
  sum(is_not_available) as is_not_available ,
  sum(is_available)/(sum(is_available)+sum(is_not_available)) as fraction
  from available_table group by(listing_id);
```



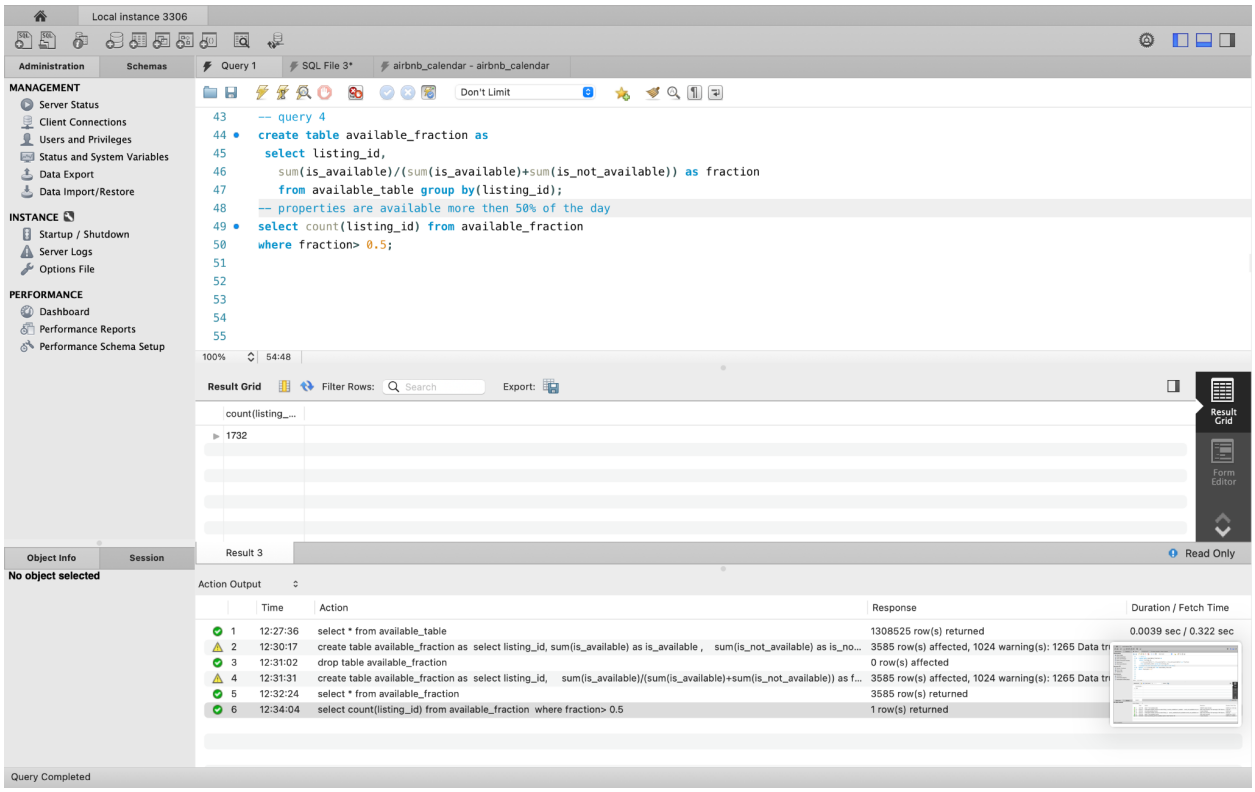
4. How many properties were available on more than 50% of the days? How many properties were available on more than 75% of the days?

Create a table from the previous table in which property and their availability attributes are present, In new table, where we store property and their fraction of available days to total days.

```
create table available_fraction as
 select listing_id,
   sum(is_available)/(sum(is_available)+sum(is_not_available)) as fraction
   from available_table group by(listing_id);
```

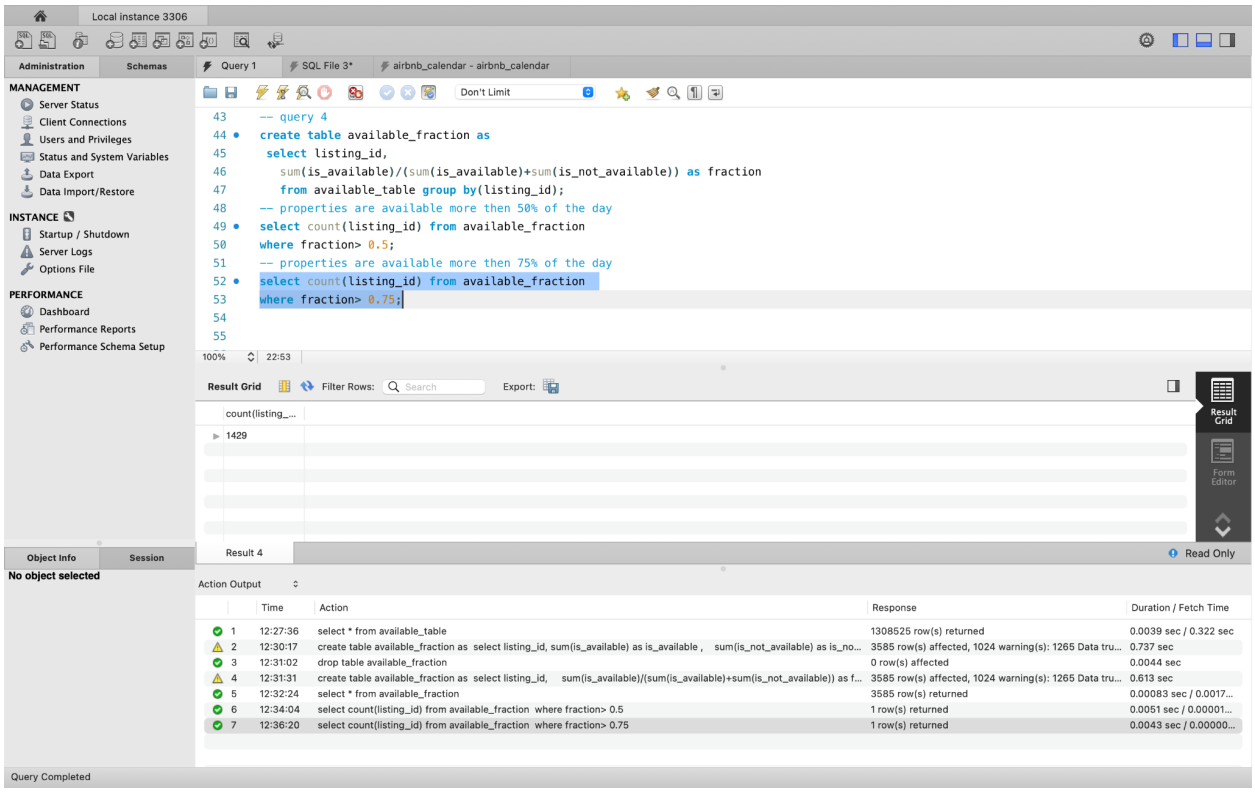
Query 1 : properties are available more then 50% of the day

select count(listing_id) from available_fraction
where fraction> 0.5;



Query 2: properties are available more then 75% of the day

select count(listing_id) from available_fraction
where fraction> 0.75;



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

create table table_min_max_average as
select listing_id, min(price) as min,
max(price) as max,
avg(price) as average from new_airbnb__calender
where available='t'
group by (listing_id) ;

select * from table_min_max_average order by listing_id;

Local instance 3306

Administration | Schemas | Query 1 | SQL File 3* | airbnb_calendar - airbnb_calendar

SCHEMAS

Filter objects

- kirti_sigmoid
  - Tables
  - Views
  - Stored Procedures
  - Functions
- sql_assigment
  - Tables
    - airbnb_calendar -...
    - airbnb_calendar -...
    - airbnb_calendar -...
    - airbnb__calender
    - available_fraction
    - available_table
    - new_airbnb__calen...
  - Views
  - Stored Procedures
  - Functions
- sys

Object Info | Session

Table: new_airbnb__calender

Columns:

listing_id	int
date	text
available	text
price	text

Don't Limit

```
52 •  select count(listing_id) from available_fraction
53    where fraction> 0.75;
54
55    --  find the min ,max and average of each price
56 •  create table table_min_max_average as
57    select listing_id, min(price) as min,
58    max(price) as max,
59    avg(price) as average from new_airbnb__calender
60    where available='t'
61    group by (listing_id) ;
62
63 •  select * from table_min_max_average order by listing_id;
64
65
66
67
68
```

100% 48:55

Result Grid | Filter Rows: Search | Export: | Fetch rows:

listing_id	min	max	average
3353	32	36	35.204819277108435
5506	145	275	147.2674418604651
6695	195	325	197.40740740740742
6976	65	65	65
8792	154	154	154
9273	225	225	225
9765	192	490	236.85635359116023
9824	209	490	222.32198142414862
9855	259	309	266.55494505494505
9857	301	702	363.39481268011525
9858	449	699	486.77472527472526
9860	240	533	269.75920679886684

table_min_max_average 8

Result Grid | Form Editor | Field Types

Read Only

Action Output

	Time	Action	Response	Duration / Fetch Time
9	12:45:46	select * from table_min_max_average	3585 row(s) returned	0.00079 sec / 0.0025...
10	12:48:00	select * from table_min_max_average order by listing_id	3585 row(s) returned	0.0073 sec / 0.0024...

Query Completed

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

select listing_id, average from table_min_max_average
where average> 500;