

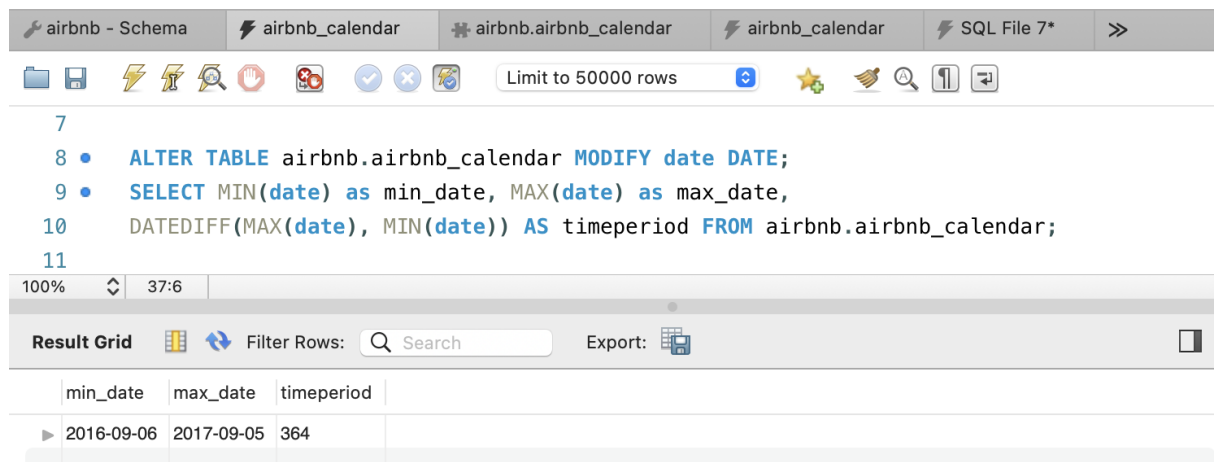
## SQL assignment:

(f and t mean false and true, respectively)

Please share query and output for each:

Questions:

Q1. What is the time period used?



The screenshot shows a SQL IDE interface with a query editor and a result grid. The query editor contains the following SQL code:

```
7
8 • ALTER TABLE airbnb.airbnb_calendar MODIFY date DATE;
9 • SELECT MIN(date) as min_date, MAX(date) as max_date,
10    DATEDIFF(MAX(date), MIN(date)) AS timeperiod FROM airbnb.airbnb_calendar;
11
```

The result grid shows the output of the query:

min_date	max_date	timeperiod
2016-09-06	2017-09-05	364

Q3. 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)

airbnb - Schema	airbnb_calendar	airbnb.airbnb_calendar	airbnb_calendar	SQL File 7*	SQL File 8*	SQL
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Limit to 50000 rows

```

1 • SELECT listing_id AS property, SUM(CASE WHEN available = 't' THEN 1 ELSE 0 END) AS Available,
2     SUM(CASE WHEN available = 'f' THEN 1 ELSE 0 END) AS Unavailable FROM airbnb.airbnb_calendar
3     GROUP BY listing_id;

```

100%

9:3

Result Grid	Filter Rows:	Search	Export:
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	
13547301	129	236	
5434353	319	46	
225979	339	26	
3420384	349	16	
13512930	0	365	

Q4. How many properties were available on more than 50% of the days? How many properties were available on more than 75% of the days?

4 a.

airbnb - Schema	airbnb_calendar	airbnb.airbnb_calendar	airbnb_calendar	SQL File 7*	SQL File 8*	>>
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Limit to 50000 rows

```

1 • SELECT listing_id, percent FROM (
2     SELECT listing_id, (count(case when available = 't' then 1 end) / count(*)) * 100 AS PERCENT
3     FROM airbnb_calendar
4     GROUP BY listing_id
5     ) AS temp WHERE percent > 50;

```

100%

38:5

Result Grid	Filter Rows:	Search	Export:
listing_id	percent		
3075044	98.3562		
6976	87.3973		
7651065	91.5068		
5706985	94.2466		
2843445	100.0000		
753446	95.0685		
12023024	93.9726		
1668313	93.4247		
5434353	87.3973		
225979	92.8767		

4 b.

airbnb - Schema    airbnb\_calendar    airbnb.airbnb\_calendar    airbnb\_calendar    SQL File 7\*    SQL File 8\*    SQL File 9\*    >>

Limit to 50000 rows

```

1 • SELECT listing_id, percent from (
2     SELECT listing_id, (count(case when available = 't' then 1 end) / count(*)) * 100 AS PERCENT
3     FROM airbnb_calendar
4     GROUP BY listing_id
5     ) AS temp WHERE percent > 75;

```

100%    38:5

Result Grid    Filter Rows:    Search    Export:   

listing_id	percent
3075044	98.3562
6976	87.3973
7651065	91.5068
5706985	94.2466
2843445	100.0000
753446	95.0685
12023024	93.9726
1668313	93.4247
5434353	87.3973
225979	92.8767
3420384	95.6164
7482195	80.8219
2583074	90.9589
225834	81.9178
321328	97.5342

Q5. Create a table with max, min and average price of each property

airbnb - Schema    airbnb\_calendar    airbnb.airbnb\_calendar    airbnb\_calendar    SQL File 7\*    SQL File 8\*    >>

Limit to 50000 rows

```

1 • SELECT listing_id AS property, MAX(CAST(SUBSTRING(price,2,10) AS DECIMAL(10,2))) AS Max,
2     MIN(CAST(SUBSTRING(price,2,10) AS DECIMAL(10,2))) AS Min,
3     AVG(CAST(SUBSTRING(price,2,10) AS DECIMAL(10,2))) AS Average
4     FROM airbnb_calendar
5     GROUP BY listing_id;

```

100%    29:5

Result Grid    Filter Rows:    Search    Export:   

property	Max	Min	Average
12147973	0.00	0.00	0.000000
3075044	75.00	0.00	66.698630
6976	65.00	0.00	56.808219
1436513	75.00	0.00	20.136986
7651065	79.00	0.00	72.290411
12386020	75.00	0.00	11.917808
5706985	200.00	0.00	105.326027
2843445	75.00	75.00	75.000000
753446	69.00	0.00	56.435616
849408	309.00	0.00	74.145205
12023024	60.00	0.00	51.038356
1668313	57.00	0.00	53.252055
2684840	0.00	0.00	0.000000
13547301	150.00	0.00	53.013699
5434353	145.00	0.00	126.726027
225979	60.00	0.00	55.726027
3420384	170.00	0.00	159.123288
13512930	0.00	0.00	0.000000
7482195	49.00	0.00	39.602740
7252607	49.00	0.00	35.172603
2583074	45.00	0.00	36.452055

Q6. Extract properties with an average price of more than \$500

The screenshot shows a SQL editor with a toolbar at the top containing icons for file operations, execution, and search. The query editor displays the following SQL code:

```
1 • SELECT avg(CAST(SUBSTRING(price,2,10) AS DECIMAL(10,2))) AS prices
2 FROM airbnb_calendar WHERE price!='';
```

Below the query editor, a status bar shows "100%" zoom and "38:2" cursor position. The "Result Grid" section is visible, showing a single column header "prices" and one data row with the value "191.691385".