# **SQL Code and Outputs for New Orleans Airbnb Project**

## -- Queries Utilized for Tableau Dashboard --

## -- Top 10 Host By Listing Volume--

```
Select
host_id,
host_name,
count(id) as listing_count
from
nola_listings
group by host_id, host_name
order by 3 desc
limit 10;
```

	host_id	host_name	listing_count
•	106289693	Vello	81
	64823547	Brenna And Nick	79
	112910785	Marigny	65
	501999514	RoomPicks	62
	442915263	Hosteeva California Building	62
	548480716	California Building	60
	218602737	Sonder (New Orleans)	59
	64365837	Mike	57
	276892829	Heirloom	46
	550629322	The Pelican	44

## -- Average Price For 1-5 Bedrooms and Studio-

#### Select

```
case when bedrooms = 0 then 'Studio/Bedrooms Not Listed' else bedrooms end as bedrooms,
round(avg(price),0) as avg_price_per_night
from
nola_listings
where bedrooms in (1, 2, 3, 4, 5,'Studio/Bedrooms Not Listed')
group by 1
order by 2 asc;
```

	bedrooms	avg_price_per_night		
•	1	156		
	2	201		
	Studio/Bedrooms Not	238		
	3	278		
	4	440		
	5	574		

## -- Top 10 Areas with Highest Avg Price Per Night--

```
select
```

from

```
neighbourhood_cleansed as neighborhood,
      round(avg(price),0) as avg_price,
      count(id) as number_of_listings
nola_listings
group by 1
```

order by 2 desc limit 10;

	neighborhood	avg_price	number_of_listings
•	Read Blvd East	372	15
	French Quarter	354	202
	Central Business District	351	1005
	Tulane - Gravier	309	145
	Lake Catherine	304	26
	Fillmore	300	30
	Lower Garden District	297	272
	Marigny	296	369
	Pontchartrain Park	285	7
	Milan	275	107

## -- Neighborhoods with Highest Projected Monthly Revenue--

```
with projected_revenue as
             (select id,
                    host id,
                    neighbourhood cleansed AS neighborhood,
                    price * (30 - availability 30) as projected 30 day revenue,
                    id as listing id
             from nola_listings
```

```
order by projected_30_day_revenue desc)
select
neighborhood,
sum(projected_30_day_revenue) as monthly_projected_revenue,
count(listing_id) as total_listings
from projected_revenue
group by neighborhood
order by 2 desc
limit 10;
```

	neighborhood	monthly_projected_revenue	total_listings
•	Central Business District	6174146	1005
	Central City	2335893	515
	Marigny	2103573	369
	Treme - Lafitte	1400660	342
	Mid-City	1376571	403
	Lower Garden District	1300744	272
	Seventh Ward	1242797	388
	French Quarter	918182	202
	Tulane - Gravier	798368	145
	Bywater	786230	191

## -- Avg price per neighborhood-

```
with neighborhood price as
      (select
      neighbourhood cleansed as neighborhood,
      round(avg(price),0) as avg_price,
      count(*) as number of listings
from
nola_listings
group by 1
order by 2 desc)
select
      np.neighborhood,
      nl.latitude,
      nl.longitude,
      np.avg price,
      np.number_of_listings
from neighborhood_price np
      join
nola listings nl on np.neighborhood = nl.neighbourhood cleansed
```

#### order by 4 desc;

	neighborhood	latitude	longitude	avg_price	number_of_listings
	Read Blvd East	30.02832	-89.95416	372	15
	Read Blvd East	30.02382	-89.95206	372	15
	Read Blvd East	30.03473237	-89.95054994	372	15
	French Quarter	29.96254	-90.06653	354	202
	French Quarter	29.96433	-90.06222	354	202
	French Quarter	29.96454	-90.06268	354	202
	French Quarter	29.95552874	-90.06887866	354	202
	French Quarter	29.95686	-90.06793	354	202
	French Quarter	29.9599	-90.06028	354	202
۰	French Quarter	29.96534	-90.06398	354	202

#### -- Additional Queries --

#### -- Occupancy Rate By Neighborhood--

```
with occ_rate as
             (select id,
                   host_id,
                   neighbourhood_cleansed as neighborhood,
                   30 - availability_30 as booked_days,
                   price * (30 - availability_30) as projected_30_day_revenue
             from nola listings
            order by booked days desc)
select
  neighborhood,
  round(avg(booked_days),2) as avg_booked_days,
  round(avg(booked_days)/30 ,2)* 100 as occupancy_rate,
  sum(projected 30 day revenue) as monthly projected revenue,
  count(id) as number of listings
from occ rate
group by neighborhood
order by 3 desc;
```

	neighborhood	avg_booked_days	occupancy_rate	monthly_projected_revenue	number_of_listings
•	Florida Area	28.33	94.00	11533	3
	St. Thomas Dev	22.65	76.00	211110	40
	Black Pearl	21.78	73.00	70844	23
Г	Touro	21.16	71.00	204169	37
	Gert Town	20.60	69.00	53947	20
	Bywater	20.42	68.00	786230	191
	Irish Channel	20.35	68.00	332519	84
Œ	Garden District	19.89	66.00	56319	18
	East Carrollton	19.10	64.00	162958	48
	Marigny	18.86	63.00	2103573	369

## -- Top 10 Neighborhoods with highest Occupancy Rate--

```
with occ_rate as
             (select id,
                   host id,
                   neighbourhood_cleansed as neighborhood,
                   30 - availability_30 as booked_days,
                   price * (30 - availability_30) as projected_30_day_revenue
             from nola listings
            order by booked_days desc)
select
  neighborhood,
  round(avg(booked_days),2) as avg_booked_days,
  round(avg(booked_days)/30 ,2)* 100 as occupancy_rate,
  sum(projected_30_day_revenue) as monthly_projected_revenue,
  count(id) as number_of_listings
from occ rate
group by neighborhood
order by 4 desc
limit 10;
```

	neighborhood	avg_booked_days	occupancy_rate	monthly_projected_revenue	number_of_listings
•	Central Business District	16.20	54.00	6174146	1005
	Central City	16.50	55.00	2335893	515
	Marigny	18.86	63.00	2103573	369
	Treme - Lafitte	15.84	53.00	1400660	342
	Mid-City	18.01	60.00	1376571	403
	Lower Garden District	17.33	58.00	1300744	272
	Seventh Ward	16.80	56.00	1242797	388
	French Quarter	15.54	52.00	918182	202
	Tulane - Gravier	16.98	57.00	798368	145
	Bywater	20.42	68.00	786230	191

#### -- Ratings by Neighborhood with listings between 100 and 500 --

```
select
```

```
neighbourhood_cleansed as neighborhood,
    round(avg(review_scores_cleanliness),2) as cleanliness_rating,
    round(avg(review_scores_location),2) as location_Rating,
    round(avg(review_scores_value),2) as value_Rating,
    round((avg(review_scores_cleanliness) + avg(review_scores_location) +
avg(review_scores_value))/3,2) as overall_rating,
    count(*) as total_listings
from nola_listings
group by neighborhood
having total_listings > 99 and total_listings < 501
order by 5 desc;
```

neighborhood	cleanliness_rating	location_Rating	value_Rating	overall_rating	total_listings
Marigny	4.54	4.59	4.48	4.54	369
Milan	4.56	4.35	4.44	4.45	107
Bywater	4.41	4.36	4.36	4.38	191
Uptown	4.36	4.42	4.3	4.36	104
Tulane - Gravier	4.42	4.23	4.37	4.34	145
Mid-City	4.34	4.31	4.31	4.32	403
St. Claude	4.35	4.14	4.27	4.25	199
Bayou St. John	4.3	4.22	4.22	4.24	124
Seventh Ward	4.33	4.08	4.26	4.22	388
Treme - Lafitte	4.28	4.18	4.21	4.22	342

```
-- Ratings by Neighborhood with all total listings--
select
```

```
neighbourhood_cleansed as neighborhood,
round(avg(review_scores_cleanliness),2) as cleanliness_rating,
round(avg(review_scores_location),2) as location_Rating,
round(avg(review_scores_value),2) as value_Rating,
round((avg(review_scores_cleanliness) + avg(review_scores_location) +
avg(review_scores_value))/3,2) as overall_rating,
count(*) as total_listings
from nola_listings
group by neighborhood
order by 5 desc;
```

	neighborhood	cleanliness_rating	location_Rating	value_Rating	overall_rating	total_listing
۰	New Aurora - English Turn	4.84	4.53	4.88	4.75	4
	Lake Terrace & Oaks	4.81	4.56	4.71	4.69	4
	Gert Town	4.79	4.47	4.71	4.66	20
	Desire Area	4.77	4.44	4.76	4.66	4
	Irish Channel	4.63	4.67	4.59	4.63	84
	Freret	4.6	4.64	4.56	4.6	42
_	Marigny	4.54	4.59	4.48	4.54	369
	City Park	4.52	4.57	4.48	4.52	40
	Algiers Point	4.52	4.51	4.49	4.51	61
	Florida Area	4.74	4.05	4.69	4.49	3