**Property Listing Database**

**1. What are the top 5 most expensive listings overall?**

SELECT

id, host\_name, price

FROM

listings

ORDER BY

price DESC

LIMIT 5

**2. Can you provide a breakdown of the number of listings in each neighbourhood?**

SELECT

neighbourhood,

count(id) AS no\_of\_listings

FROM

listings

GROUP BY

neighbourhood

ORDER BY 2 DESC

**3. What is the average price of listings in each neighbourhood?**

SELECT

neighbourhood,

round(avg(price),2) AS avg\_price\_of\_listings

FROM

listings

GROUP BY

neighbourhood

ORDER BY 2 DESC

**4. What is the overall occupancy rate for listings?**

SELECT

100 - ROUND((avg(availability\_365)/365) \* 100,2)

FROM

listings

**5. How many nights, on average, are listings booked per month?**

SELECT

id,

(365 - availability\_365) / 12 as nights\_booked

FROM

listings

ORDER BY

2 DESC

**6. What are the highest-rated listings based on guest reviews?**

WITH cte AS

(SELECT

id, name,

substring(name FROM '★([0-9.]+)') as rating

FROM

listings

)

SELECT

\*

FROM

cte

WHERE

rating = '5.0'

**7. What is the average review score for listings in different neighbourhoods?**

WITH cte AS

(SELECT

neighbourhood,

substring(name FROM '★([0-9.]+)')::numeric as rating

FROM

listings

)

SELECT

neighbourhood,

ROUND(avg(rating),2)

FROM

cte

WHERE

rating is not null

GROUP BY

1

ORDER BY 2 DESC

**8. Who are the top 5 hosts with the most listings?**

SELECT

host\_name,

count(id) AS no\_of\_listings

FROM

listings

GROUP BY 1

ORDER BY 2 DESC

LIMIT 5

**9. What is the average number of listings per host?**

with cte as

(SELECT

host\_name,

count(id) as cnt

FROM

listings

GROUP BY 1)

SELECT

ROUND(avg(cnt),2) as Avg\_no\_of\_listings

FROM

cte

**10. What are the most common room\_type provided by hosts?**

SELECT

room\_type,

count(\*) as no\_of\_rooms

FROM

listings

GROUP BY 1

ORDER BY 2 DESC

LIMIT 1

**11. Do listings with certain room\_type tend to have higher ratings or prices?**

WITH cte AS

(SELECT

room\_type,

substring(name FROM '★([0-9.]+)')::numeric as rating,

price

FROM

listings

)

SELECT

room\_type,

ROUND(avg(rating),2) AS avg\_rating,

ROUND(avg(price),2) AS avg\_price

FROM

cte

WHERE

rating is not null

GROUP BY

1

ORDER BY 2 DESC

**12. What is the total revenue generated from listings in a specific neighbourhood?**

SELECT

neighbourhood,

SUM((365-availability\_365)\*price) as revenue

FROM

listings

GROUP BY

1

ORDER BY

2 DESC

**13. Can you identify the top 5 listings contributing the most to overall revenue?**

SELECT

ID,

name,

host\_name,

SUM((365-availability\_365)\*price) AS revenue

FROM

listings

GROUP BY

1,2,3

ORDER BY

4 DESC

LIMIT 5

**14. What is the average price difference between superhosts(more than 25 listings) and regular hosts?**

WITH cte AS(

SELECT

host\_name,

COUNT(id) AS no\_of\_listing,

AVG (price) AS avg\_price

FROM

listings

GROUP BY 1

)

SELECT

CASE

WHEN no\_of\_listing >25 THEN 'SUPER\_HOST'

ELSE

'REGULAR\_HOST'

END AS host\_classification,

AVG(avg\_price)

FROM

cte

GROUP BY 1

**15. Can you identify any outliers in the pricing distribution?**

SELECT \*

FROM

listings

WHERE

price > (SELECT AVG(price) + 2 \* STDDEV(price) FROM listings)

OR

price < (SELECT AVG(price) - 2 \* STDDEV(price) FROM listings)

**16. Are there any correlations between review scores and listing characteristics?**

WITH cte AS

(SELECT

room\_type,

substring(name FROM '★([0-9.]+)')::numeric as rating,

price,

minimum\_nights,

number\_of\_reviews,

reviews\_per\_month :: numeric,

calculated\_host\_listings\_count,

availability\_365,

number\_of\_reviews\_ltm

FROM

listings

)

SELECT

room\_type,

ROUND(avg(price),2) as price,

ROUND(avg(rating),2) as rating,

ROUND(avg(minimum\_nights),2) as minimum\_nights,

ROUND(avg(number\_of\_reviews),2) as number\_of\_reviews,

ROUND(avg(reviews\_per\_month),2) as reviews\_per\_month,

ROUND(avg(calculated\_host\_listings\_count),2) as calculated\_host\_listings\_count,

ROUND(avg(availability\_365),2) as availability\_365,

ROUND(avg(number\_of\_reviews\_ltm),2) as number\_of\_reviews\_ltm

FROM

cte

WHERE

rating is not null

GROUP BY

1

ORDER BY 2 DESC

**17. How has the distribution of property types (e.g., apartment, house, condo)?**

SELECT

SPLIT\_PART(name, 'in', 1) as unit,

ROUND(avg(price),2) AS avg\_price,

COUNT(id)

FROM

listings

GROUP BY 1

ORDER BY 2 DESC

**18. How do different property types vary in terms of average price and popularity?**

SELECT

SPLIT\_PART(name, 'in', 1) as unit,

ROUND(AVG(price),2),

AVG(substring(name FROM '★([0-9.]+)')::numeric )as rating

FROM

listings

GROUP BY 1

ORDER BY 3 DESC

**19. Can you identify listings with the highest and lowest response rates?**

SELECT

id, reviews\_per\_month

FROM

listings

WHERE

reviews\_per\_month=(SELECT MIN(reviews\_per\_month) FROM listings)

OR

reviews\_per\_month=(SELECT MAX(reviews\_per\_month) FROM listings)