Hotle\_Reservation Project

KPI’s

1. What is the total number of reservations in the dataset?

SELECT COUNT(booking\_id) AS total\_reservation

FROM transaction\_hotle



1. Which meal plan is the most popular among guests?

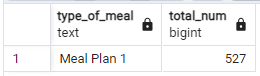
SELECT type\_of\_meal, COUNT(\*) total\_num

FROM transaction\_hotle

GROUP BY type\_of\_meal

ORDER BY total\_num DESC

LIMIT 1



1. What is the average price per room for reservations involving children?

SELECT ROUND(AVG(avg\_price\_per\_room),2) AVG\_price

FROM transaction\_hotle

WHERE no\_of\_children <> 0

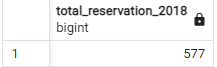


1. How many reservations were made for the year 20XX (replace XX with the desired year)?

SELECT COUNT(\*) AS total\_reservation\_2018

FROM transaction\_hotle

WHERE arrival\_date LIKE '%2018'



1. What is the most commonly booked room type?

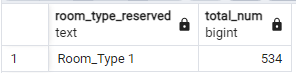
SELECT room\_type\_reserved, COUNT(\*) AS total\_num

FROM transaction\_hotle

GROUP BY room\_type\_reserved

ORDER BY total\_num DESC

LIMIT 1



1. How many reservations fall on a weekend (no\_of\_weekend\_nights > 0)?

SELECT COUNT(\*) AS total\_reservation\_weekend

FROM transaction\_hotle

WHERE no\_of\_weekend\_nights <> 0



1. What is the highest and lowest lead time for reservations?

WITH cte AS(

SELECT \*,

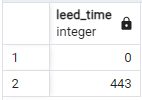
Rank() OVER(ORDER BY leed\_time DESC) rnk1

FROM transaction\_hotle

)

SELECT DISTINCT leed\_time FROM cte

WHERE rnk1 = 1 or rnk1 = (SELECT MAX(rnk1) FROM cte)



Or

SELECT FIRST\_value(leed\_time) OVER(ORDER BY leed\_time DESC) height\_value,

LAST\_VALUE(leed\_time) OVER(ORDER BY leed\_time DESC

RANGE BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING) lowest\_value

FROM transaction\_hotle

LIMIT 1;



8.What is the most common market segment type for reservations?

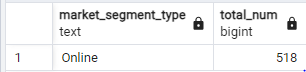
SELECT market\_segment\_type, COUNT(\*) Total\_num

FROM transaction\_hotle

GROUP BY market\_segment\_type

ORDER BY 1 DESC

LIMIT 1;



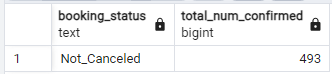
9.How many reservations have a booking status of "Confirmed"?

SELECT booking\_status, COUNT(\*) Total\_num\_confirmed

FROM transaction\_hotle

GROUP BY booking\_status

HAVING booking\_status = 'Not\_Canceled'



10.What is the total number of adults and children across all reservations?

SELECT SUM(no\_of\_adults) total\_adults, SUM(no\_of\_children) total\_children, SUM(no\_of\_adults) + SUM(no\_of\_children) total

FROM transaction\_hotle

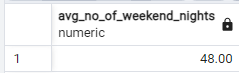
11.What is the average number of weekend nights for reservations involving children?

SELECT ROUND(AVG((SELECT SUM(no\_of\_weekend\_nights)

FROM transaction\_hotle

WHERE no\_of\_children > 0 )),2) avg\_no\_of\_weekend\_nights

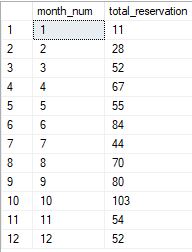
FROM transaction\_hotle



12.How many reservations were made in each month of the year?

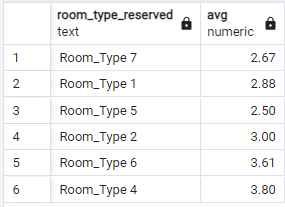
1. SELECT MONTH(arrival\_date) month\_num, COUNT(\*) total\_reservation
2. FROM hotel\_reservation

GROUP BY MONTH(arrival\_date)



13.What is the average number of nights (both weekend and weekday) spent by guests for each room type?

SELECT room\_type\_reserved, ROUND(AVG(no\_of\_weekend\_nights) + AVG(no\_of\_week\_nights),2) avg

FROM transaction\_hotle

GROUP BY room\_type\_reserved

14.For reservations involving children, what is the most common room type, and what is the average price for that room type?

1. WITH cte AS (
2. SELECT TOP(1) room\_type\_reserved, COUNT(\*) total
3. FROM hotel\_reservation
4. WHERE no\_of\_children > 0
5. GROUP BY room\_type\_reserved
6. ORDER BY 2 DESC)
7. SELECT MAX(avg\_price\_per\_room) height\_price
8. FROM hotel\_reservation

WHERE room\_type\_reserved = (SELECT room\_type\_reserved FROM cte)



15. Find the market segment type that generates the highest average price per room.

SELECT TOP(1) market\_segment\_type, avg\_price\_per\_room

FROM hotel\_reservation

ORDER BY avg\_price\_per\_room DESC

