

Hotel Reservation Analysis SQL QUERIES

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

```
SELECT COUNT(*) AS total_reservations FROM hotel_reservations;
```

Output:

	total_reservations
▶	700

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

```
SELECT type_of_meal_plan,  
COUNT(*) AS count FROM hotel_reservations  
GROUP BY type_of_meal_plan  
ORDER BY count DESC  
LIMIT 1;
```

Output:

	type_of_meal_plan	count
▶	Meal Plan 1	527

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

```
SELECT AVG(avg_price_per_room) AS average_price  
FROM hotel_reservations  
WHERE no_of_children > 0;
```

Output:

	average_price
▶	144.56833333333336

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

```
SELECT DISTINCT YEAR(STR_TO_DATE(arrival_date, '%d-%m-%Y')) AS year  
FROM hotel_reservations;  
SELECT COUNT(*) AS reservations_in_year  
FROM hotel_reservations
```

WHERE YEAR(STR_TO_DATE(arrival_date, '%d-%m-%Y')) = 2018;

Output:

	reservations_in_year
▶	577

5. What is the most commonly booked room type?

```
SELECT room_type_reserved, COUNT(*) AS count
FROM hotel_reservations
GROUP BY room_type_reserved
ORDER BY count DESC
LIMIT 1;
```

Output:

	room_type_reserved	count
▶	Room_Type 1	534

6. How many reservations fall on a weekend (no_of_weekend_nights > 0)?

```
SELECT COUNT(*) AS weekend_reservations
FROM hotel_reservations
WHERE no_of_weekend_nights > 0;
```

Output:

	weekend_reservations
▶	383

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

```
SELECT MAX(lead_time) AS highest_lead_time, MIN(lead_time) AS lowest_lead_time
FROM hotel_reservations;
```

Output

	highest_lead_time	lowest_lead_time
▶	443	0

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

```
SELECT market_segment_type, COUNT(*) AS count
FROM hotel_reservations
```

GROUP BY market_segment_type

ORDER BY count DESC

LIMIT 1;

Output:

	market_segment_type	count
▶	Online	518

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

SELECT COUNT(*) AS confirmed_reservations

FROM hotel_reservations

WHERE booking_status = 'Confirmed';

Output:

	confirmed_reservations
▶	0

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

SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children

FROM hotel_reservations;

Output:

	total_adults	total_children
▶	1316	69

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

SELECT AVG(no_of_weekend_nights) AS average_weekend_nights

FROM hotel_reservations

WHERE no_of_children > 0;

Output:

	average_weekend_nights
▶	1.0000

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

SELECT MONTH(arrival_date) AS month, COUNT(*) AS reservations_count

FROM hotel_reservations

GROUP BY MONTH(arrival_date)

ORDER BY month;

Output:

	month	reservations_count
▶	HULL	700

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

```
SELECT room_type_reserved,  
AVG(no_of_weekend_nights + no_of_week_nights) AS average_nights  
FROM hotel_reservations  
GROUP BY room_type_reserved;
```

Output:

	room_type_reserved	average_nights
▶	Room_Type 1	2.8783
	Room_Type 4	3.8000
	Room_Type 2	3.0000
	Room_Type 6	3.6111
	Room_Type 5	2.5000
	Room_Type 7	2.6667

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

```
SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS  
average_price  
FROM hotel_reservations  
WHERE no_of_children > 0  
GROUP BY room_type_reserved  
ORDER BY count DESC  
LIMIT 1;
```

Output:

	room_type_reserved	count	average_price
▶	Room_Type 1	24	123.12291666666665

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

```
SELECT market_segment_type, AVG(avg_price_per_room) AS average_price
```

FROM hotel_reservations

GROUP BY market_segment_type

ORDER BY average_price DESC

LIMIT 1;

Output:

	market_segment_type	average_price
▶	Online	112.45521235521232