## **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:**



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

```
SELECT type_of_meal_plan,

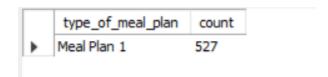
COUNT(*) AS count FROM hotel_reservations

GROUP BY type_of_meal_plan

ORDER BY count DESC

LIMIT 1;
```

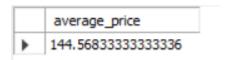
#### **Output:**



#### 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:**



### 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   |

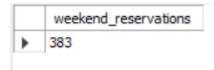
#### 6. How many reservations fall on a weekend (no\_of\_weekend\_nights > 0)?

SELECT COUNT(\*) AS weekend\_reservations

FROM hotel reservations

WHERE no of weekend nights > 0;

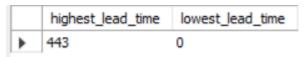
#### Output:



#### 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;

#### <u>Output</u>



#### 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   |

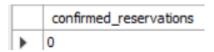
#### 9. How many reservations have a booking status of "Confirmed"?

SELECT COUNT(\*) AS confirmed reservations

FROM hotel reservations

WHERE booking\_status = 'Confirmed';

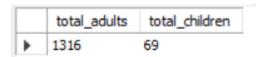
#### Output:



#### 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:**



#### 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:**



#### 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 |
|---|-------|--------------------|
| • | NULL  | 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  |
|                    | Room_Type 1 Room_Type 4 Room_Type 2 Room_Type 6 Room_Type 5 |

# 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 |