

Hotel Reservations Analysis

Insights and SQL Queries

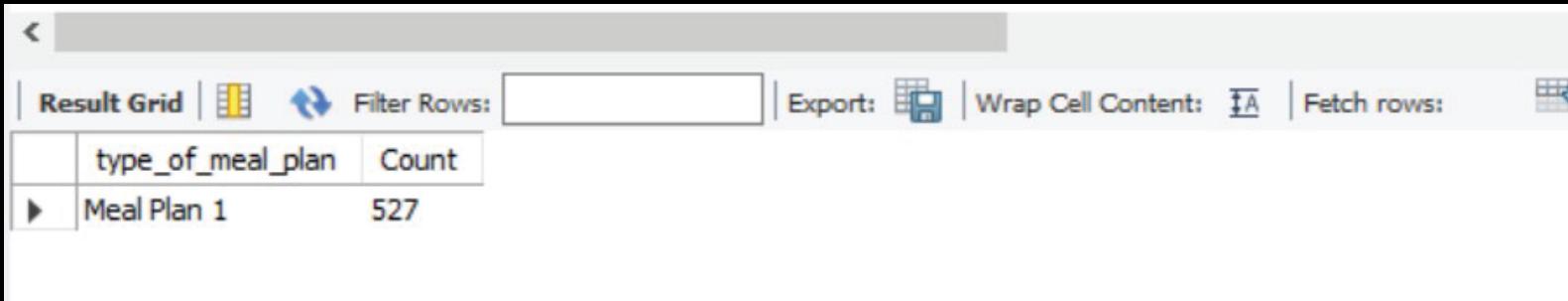
1. Total number of reservations

- This slide shows the total number of reservations made in the dataset.
- SQL Query:
- `SELECT COUNT(*) FROM hotel_reservation_dataset;`

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	COUNT(*)			
▶	700			

2. Most popular meal plan

- This slide displays the most popular meal plan chosen by guests.
- SQL Query:
- ```
SELECT type_of_meal_plan, COUNT(*) AS count
FROM hotel_reservation_dataset
GROUP BY type_of_meal_plan
LIMIT 1;
```



A screenshot of a database query results window. The window has a toolbar at the top with buttons for 'Result Grid' (selected), 'Filter Rows', 'Export', 'Wrap Cell Content', and 'Fetch rows'. The main area shows a table with two columns: 'type\_of\_meal\_plan' and 'Count'. There is one row with the value 'Meal Plan 1' in the first column and '527' in the second column.

| type_of_meal_plan | Count |
|-------------------|-------|
| Meal Plan 1       | 527   |

### 3. Average price per room for reservations involving children



- This slide shows the average price per room for reservations that include children.
- SQL Query:
- ```
SELECT AVG(avg_price_per_room) AS
Avg_price_per_room_involving_children FROM
hotel_reservation_dataset WHERE no_of_children > 0;
```

Avg_price_per_room_involving_children
144.56833333333336

4. Number of reservations made for the year 2018



- This slide displays the number of reservations made in the year 2018.
- SQL Query:
- ```
SELECT COUNT(*) AS total_reservations FROM
hotel_reservation_dataset WHERE
YEAR(STR_TO_DATE(arrival_date, '%d-%m-%Y')) = 2018;
```

The screenshot shows the MySQL Workbench interface with the following details:

- Result Grid:** A table with one row and two columns.
- Columns:** The first column is labeled "total\_reservations".
- Row Data:** The value "577" is displayed in the "total\_reservations" column.
- Toolbar:** Includes buttons for "Result Grid", "Filter Rows", "Export", and "Wrap Cell Content".

# 5. Most commonly booked room type



- This slide shows the room type that was booked the most frequently.
- SQL Query:
- ```
SELECT room_type_reserved, COUNT(*) FROM
    hotel_reservation_dataset GROUP BY room_type_reserved
    LIMIT 1;
```

A screenshot of a database query results grid. The grid has a header row and one data row. The header row contains the column names: "room_type_reserved" and "count(*)". The data row shows the value "Room_Type 1" in the first column and "534" in the second column. The interface includes a toolbar at the top with buttons for "Result Grid", "Filter Rows:", "Export", "Wrap Cell Content:", and "Fetch rows".

room_type_reserved	count(*)
Room_Type 1	534

6. Number of reservations falling on a weekend



- This slide shows the number of reservations that include at least one weekend night.
- SQL Query:
- ```
SELECT COUNT(no_of_weekend_nights) AS
NO_reservations_fall_on_weekend FROM
hotel_reservation_dataset WHERE no_of_weekend_nights >
0;
```

| Result Grid                                     |     | Filter Rows: | Export: | Wrap Cell Content: |  |
|-------------------------------------------------|-----|--------------|---------|--------------------|--|
| <a href="#">NO_reservations_fall_on_weekend</a> |     |              |         |                    |  |
| ▶                                               | 383 |              |         |                    |  |

# 7. Highest and lowest lead time for reservations



- This slide displays the highest and lowest lead time (in days) for reservations.
- SQL Query:
- ```
SELECT MAX(lead_time) AS highest_lead_time,  
       MIN(lead_time) AS lowest_lead_time FROM  
       hotel_reservation_dataset;
```

A screenshot of a database query results grid. The grid has two columns: 'highest_lead_time' and 'lowest_lead_time'. The value for 'highest_lead_time' is 443, and the value for 'lowest_lead_time' is 0. The grid includes standard data manipulation buttons like back, forward, and refresh, along with export and wrap cell content options.

	highest_lead_time	lowest_lead_time
▶	443	0

8. Most common market segment type for reservations



- This slide shows the most common market segment type for reservations.
- SQL Query:
- ```
SELECT market_segment_type, COUNT(*) FROM
 hotel_reservation_dataset GROUP BY market_segment_type
 LIMIT 1;
```

A screenshot of a database query results window. The interface includes a toolbar with "Result Grid" selected, "Filter Rows:" input, "Export" button, "Wrap Cell Content:" button, and "Fetch rows:" button. Below the toolbar is a table with two columns: "market\_segment\_type" and "count(\*)". The table contains one row with the value "Offline" in the first column and "140" in the second column.

|   | market_segment_type | count(*) |
|---|---------------------|----------|
| ▶ | Offline             | 140      |

# 9. Number of reservations with a booking status of "Confirmed"

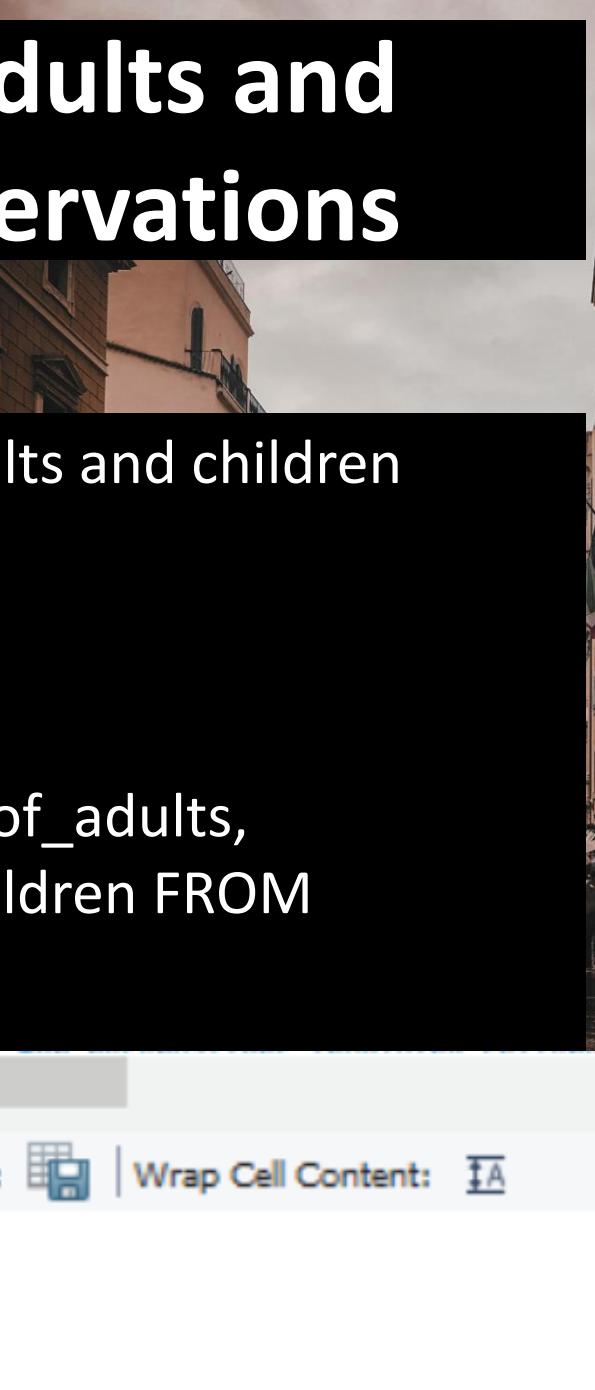


- This slide shows the number of reservations that have a booking status of 'Confirmed'.
- SQL Query:
- ```
SELECT COUNT(booking_status) AS no_of_Confirmed_status
FROM hotel_reservation_dataset WHERE booking_status =
'Confirmed';
```

no_of_Confirmed_status
0

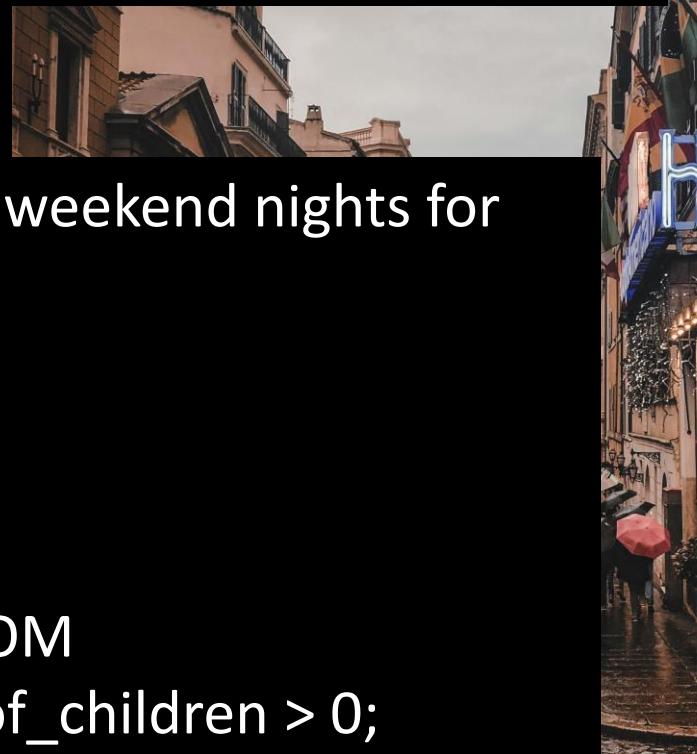
10. Total number of adults and children across all reservations

- This slide shows the total number of adults and children across all reservations.
- SQL Query:
- ```
SELECT SUM(no_of_adults) AS number_of_adults,
SUM(no_of_children) AS number_of_children FROM
hotel_reservation_dataset;
```



| Result Grid |                  | Filter Rows:       | Export: | Wrap Cell Content: |
|-------------|------------------|--------------------|---------|--------------------|
|             |                  |                    |         |                    |
|             | number_of_adults | number_of_children |         |                    |
| ▶           | 1316             | 69                 |         |                    |

# 11. Average number of weekend night for reservations involving children

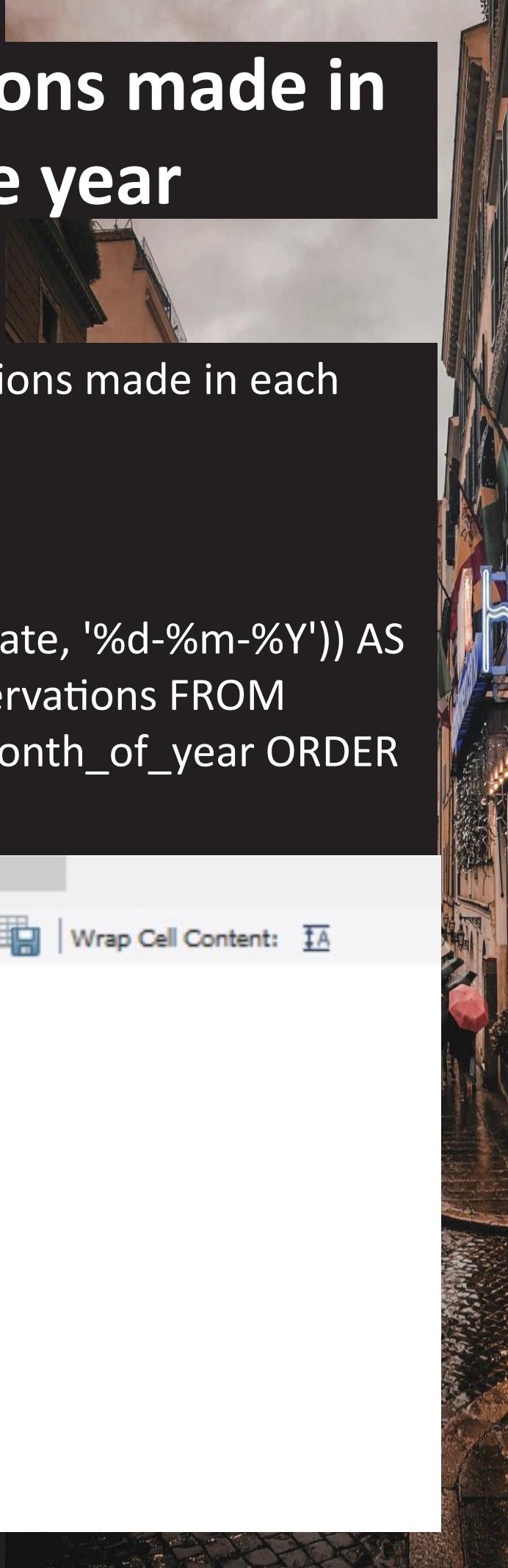


- This slide shows the average number of weekend nights for reservations that include children.
- SQL Query:
- `SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM hotel_reservation_dataset WHERE no_of_children > 0;`

| avg_weekend_nights_with_children |
|----------------------------------|
| 1.0000                           |

# 12. Number of reservations made in each month of the year

- This slide shows the number of reservations made in each month of the year.
- SQL Query:
- ```
SELECT MONTH(STR_TO_DATE(arrival_date, '%d-%m-%Y')) AS month_of_year, COUNT(*) AS total_reservations FROM hotel_reservation_dataset GROUP BY month_of_year ORDER BY month_of_year;
```

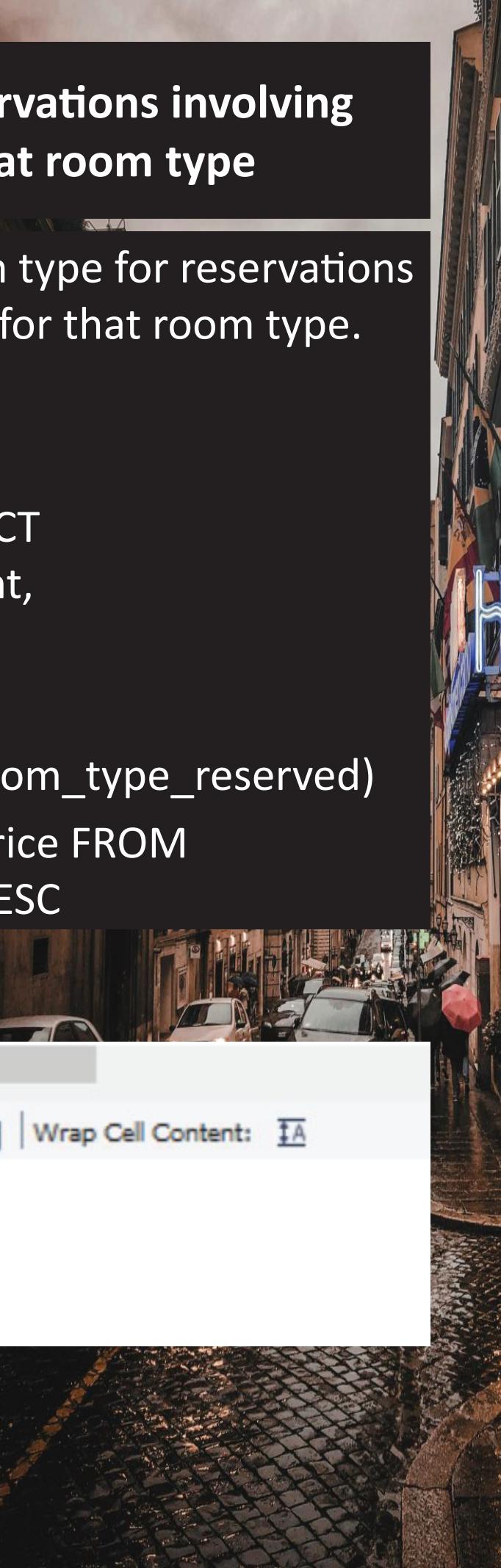


month_of_year	total_reservations
1	11
2	28
3	52
4	67
5	55
6	84
7	44
8	70
9	80
10	103
11	54
12	52

13. Most common room type for reservations involving children and average price for that room type

- This slide shows the most common room type for reservations involving children and the average price for that room type.
- SQL Query:

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



A screenshot of a database query results window. The interface includes a toolbar with 'Result Grid' (selected), 'Filter Rows', 'Export', and 'Wrap Cell Content'. The data is presented in a grid:

	room_type_reserved	count	avg_price
▶	Room_Type 1	24	123.12291666666665

14. Market segment type that generates the highest average price per room



- This slide shows the market segment type that generates the highest average price per room.
- SQL Query:
- ```
SELECT market_segment_type, AVG(avg_price_per_room) AS Avg_price FROM hotel_reservation_dataset GROUP BY market_segment_type ORDER BY Avg_price DESC LIMIT 1;
```

A screenshot of a database query results grid. The grid has a header row with columns for 'market\_segment\_type' and 'Avg\_price'. Below the header, there is one data row containing the value 'Complementary' in the first column and '2.5357142857142856' in the second column. The grid includes standard data grid controls at the top and bottom.

|   | market_segment_type | Avg_price          |
|---|---------------------|--------------------|
| ▶ | Complementary       | 2.5357142857142856 |

# Thank You!

