



Hotel Reservation Analysis Reports

Exploring Hotel Reservation Trends with SQL

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Overview

Project Objective: To analyze hotel reservation data to uncover insights into guest preferences, booking trends, and operational efficiency.

Tools Used: **MySQL** for data querying, **Python** for data processing, and PowerPoint for presentation.



Introduction

The primary objective of this project is to analyze hotel reservation data to gain insights into guest preferences, booking trends, and operational efficiencies.

By understanding these aspects, hotels can make data-driven decisions to improve their services, optimize resource allocation, and enhance customer satisfaction..

Importance of data analysis in the hotel industry.

Objectives of the analysis:

Identify popular room types and meal plans.

Analyze booking patterns over time.

Assess booking duration and optimize room allocation.

Evaluate the impact of different market segments.

Examine average room prices and booking status.

Dataset Details

- The dataset includes the following attributes:
 - **Booking_ID**: Unique identifier for each reservation.
 - **No_of_adults**: Number of adults per reservation.
 - **no_of_children**: Number of children per reservation.
 - **no_of_weekend_nights**: Weekend nights in the reservation.
 - **no_of_week_nights**: Weekday nights in the reservation.
 - **type_of_meal_plan**: Chosen meal plan.
 - **room_type_reserved**: Type of room reserved.
 - **lead_time**: Days between booking and arrival.
 - **arrival_date**: Date of arrival.
 - **market_segment_type**: Market segment of the reservation.
 - **avg_price_per_room**: Average price per room.
 - **booking_status**: Status of the booking (e.g., confirmed, canceled).



SQL Query of Hotel Reservation Analysis

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

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'SCHEMAS' tree with 'hotel_reservation' expanded, showing 'Tables' and 'reservations'. The central pane shows a query window with the following SQL code:

```
1 -- 1 Total number of reservations in the dataset:
2 SELECT COUNT(*) AS total_reservations
3 FROM reservations;
4
5
```

The 'Result Grid' below the query shows a single row with the value 700 for the column 'total_reservations'.

The bottom pane shows the 'Output' window with the 'Action Output' tab selected. It displays a list of messages from the query execution, including the count of reservations and other statistics.

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec
91	19:18:27	SELECT MONTH(amival_date) AS month, COUNT(*) AS reservations_count FROM reservat...	12 row(s) returned	0.000 sec / 0.000 sec
92	19:18:27	SELECT room_type_reserved, AVG(no_of_weekend_nights + no_of_week_nights) AS ...	6 row(s) returned	0.000 sec / 0.000 sec
93	19:18:27	SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS...	1 row(s) returned	0.000 sec / 0.000 sec
94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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

The screenshot shows a SQL IDE interface with a query editor, a result grid, and an output pane.

Query Editor:

```
-- 2 Most popular meal plan among guests:
SELECT type_of_meal_plan, COUNT(*) AS count
FROM reservations
GROUP BY type_of_meal_plan
ORDER BY count DESC
LIMIT 1;
```

Result Grid:

type_of_meal_plan	count
Meal Plan 1	527

Output Pane:

Action Output

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
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3. What is the average price per room for reservations involving children?

File Edit View Query Database Server Tools Scripting Help

Navigator: Table Expr... 13- -- Temporary Table 14- -- Stored Procedures SQL File 15 SQL File 16 Task 2 SQL File 18* SQL File 18* Administration - Users and Privil... SQL File 19*

SCHEMAS

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
- sakila
- sys
- world

Limit to 1000 rows

```
12
13 -- 3 Average price per room for reservations involving children:
14 • SELECT AVG(avg_price_per_room) AS avg_price_per_room_with_children
15 FROM reservations
16 WHERE no_of_children > 0;
17
```

Result Grid

avg_price_per_room_with_children
144.625000

Administration Schemas

Information

No object selected

Object Info Session

Query Completed

Result 1 Result 2 Result 3 × Result 4 Result 5 Result 6 Result 7 Result 8 Result 9 Result 10 Result 11 Result 12 Result 13 Result 14 Result 15 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
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4. How many reservations were made for the year 20XX (replace XX with the desired year)?

The screenshot shows a SQL IDE interface with a query editor and a results pane. The query editor contains the following SQL code:

```
17
18  -- 4 Number of reservations made for the year 20XX (replace XX with the desired year):
19  • SELECT COUNT(*) AS reservations_in_year
20    FROM reservations
21    WHERE YEAR(arrival_date) = 2020;
22
```

The results pane shows a single row with the value 0 for the column reservations_in_year.

The bottom pane shows the Action Output table with the following data:

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
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94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

5. What is the most commonly booked room type?

File Edit View Query Database Server Tools Scripting Help

Navigator: Table Expr... 13-- Temporary Table 14-- Stored Procedures SQL File 15 SQL File 16 Task 2 SQL File 18* SQL File 18* Administration - Users and Privi... SQL File 19*

SCHEMAS

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
- sakila
- sys
- world

23 -- 5 Most commonly booked room type:
24 • SELECT room_type_reserved, COUNT(*) AS count
25 FROM reservations
26 GROUP BY room_type_reserved
27 ORDER BY count DESC
28 LIMIT 1;

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

	room_type_reserved	count
▶	Room_Type 1	534

Administration Schemas

Information

No object selected

Object Info Session

Result 1 Result 2 Result 3 Result 4 Result 5 × Result 6 Result 7 Result 8 Result 9 Result 10 Result 11 Result 12 Result 13 Result 14 Result 15 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_status...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
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✓ 93	19:18:27	SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the 'SCHEMAS' tree with 'hotel_reservation' expanded, showing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The 'Tables' folder is selected, and 'reservations' is highlighted. The right pane shows the 'Table Expr...' window with the following SQL query:

```
29
30 -- 6 Number of reservations that fall on a weekend:
31 • SELECT COUNT(*) AS weekend_reservations
32 FROM reservations
33 WHERE no_of_weekend_nights > 0;
34
```

Below the query editor, the 'Result Grid' is visible, showing a single row with the value '383' under the column 'weekend_reservations'.

The bottom pane shows the 'Output' window with the 'Action Output' tab selected. It displays a list of messages from the query execution, including the results of the SELECT statement.

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
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The bottom status bar indicates 'Query Completed'.

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

Navigator: Table Expr... 13- -- Temporary Table 14- -- Stored Procedures SQL File 15 SQL File 16 Task 2 SQL File 18* SQL File 18* Administration - Users and Privil... SQL File 19*

SCHEMAS

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
- sakila
- sys
- world

34

35 -- 7 Highest and lowest lead time for reservations:

36 • SELECT MAX(lead_time) AS highest_lead_time, MIN(lead_time) AS lowest_lead_time

37 FROM reservations;

38

Result Grid Filter Rows: Export: Wrap Cell Content:

	highest_lead_time	lowest_lead_time
443		0

Administration Schemas

Information

No object selected

Object Info Session

Result 1 Result 2 Result 3 Result 4 Result 5 Result 6 Result 7 x Result 8 Result 9 Result 10 Result 11 Result 12 Result 13 Result 14 Result 15 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
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94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

7:23 PM

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

The screenshot shows a SQL IDE interface with a query editor and a results pane. The query editor contains the following SQL code:

```
-- 8 Most common market segment type for reservations:
SELECT market_segment_type, COUNT(*) AS count
FROM reservations
GROUP BY market_segment_type
ORDER BY count DESC
LIMIT 1;
```

The results pane shows the following table:

market_segment_type	count
Online	518

The bottom pane shows the Action Output for the query, with the following columns: #, Time, Action, Message, and Duration / Fetch. The output shows that the query returned 1 row(s) for the market segment type 'Online'.

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec
91	19:18:27	SELECT MONTH(arrival_date) AS month, COUNT(*) AS reservations_count FROM reservat...	12 row(s) returned	0.000 sec / 0.000 sec
92	19:18:27	SELECT room_type_reserved, AVG(no_of_weekend_nights + no_of_week_nights) AS ...	6 row(s) returned	0.000 sec / 0.000 sec
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94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'SCHEMAS' pane shows the 'hotel_reservation' database with its tables, views, stored procedures, and functions. The main window shows a query executed in 'SQL File 19'. The query is as follows:

```
-- 9 Number of reservations with a booking status of "Confirmed":
SELECT COUNT(*) AS confirmed_reservations
FROM reservations
WHERE booking_status = 'Confirmed';
```

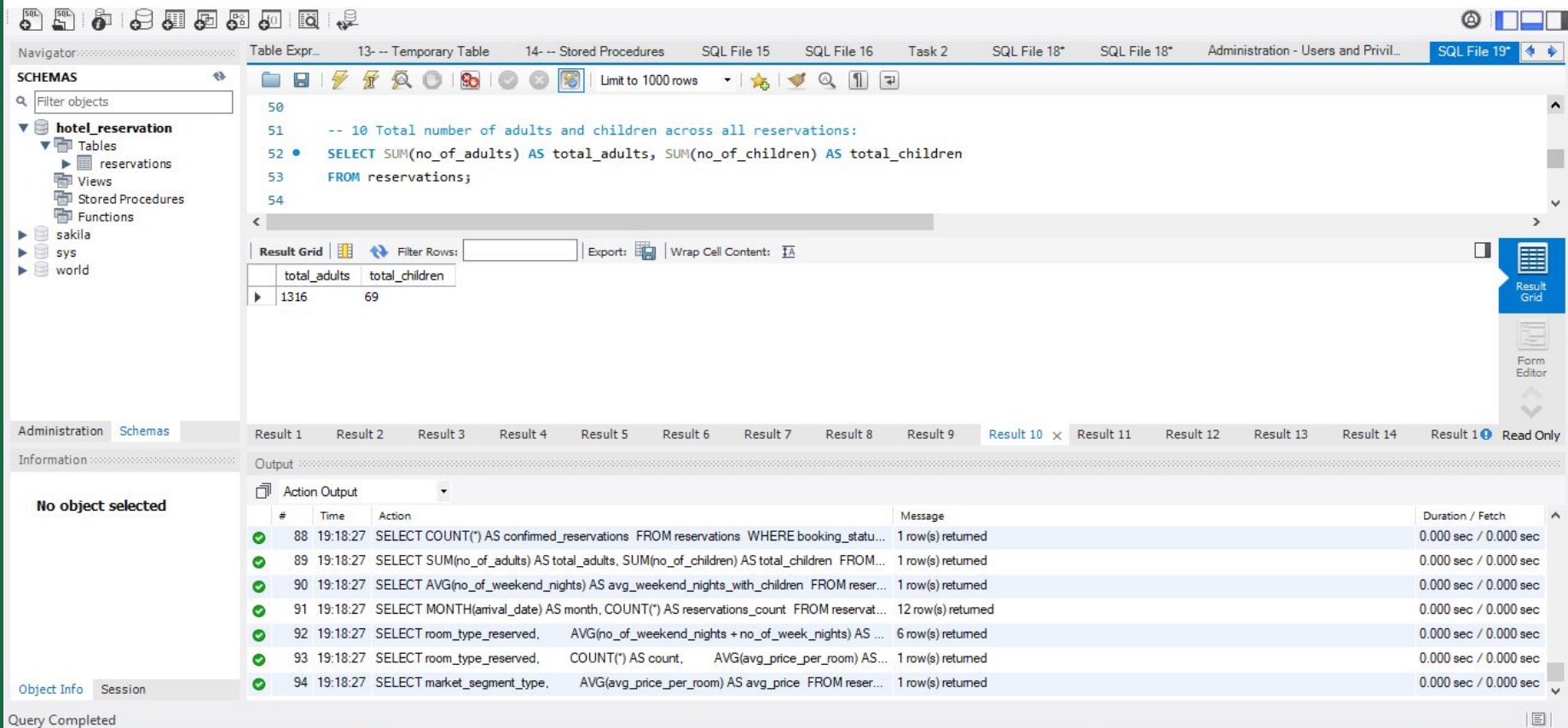
The query result is displayed in the 'Result Grid' pane, showing a single row with the value 0 for 'confirmed_reservations'.

Below the query result, the 'Output' pane shows the 'Action Output' table, which lists the execution details of the query. The table has columns for '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'.

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_status = 'Confirmed';	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM reservations	1 row(s) returned	0.000 sec / 0.000 sec
90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reservations	1 row(s) returned	0.000 sec / 0.000 sec
91	19:18:27	SELECT MONTH(arrival_date) AS month, COUNT(*) AS reservations_count FROM reservations	12 row(s) returned	0.000 sec / 0.000 sec
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93	19:18:27	SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS avg_price FROM reservations	1 row(s) returned	0.000 sec / 0.000 sec
94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reservations	1 row(s) returned	0.000 sec / 0.000 sec

The bottom status bar indicates 'Query Completed'.

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



The screenshot displays the SQL Server Enterprise Manager interface. The left pane shows the 'SCHEMAS' tree with 'hotel_reservation' expanded. The center pane shows a query window with the following SQL code:

```
50
51 -- 10 Total number of adults and children across all reservations:
52 • SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children
53 FROM reservations;
54
```

Below the query, the 'Result Grid' shows the output:

total_adults	total_children
1316	69

The bottom pane shows the 'Output' tab with a table of query actions and their results:

#	Time	Action	Message	Duration / Fetch
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
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94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

The status bar at the bottom indicates 'Query Completed'.

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

Navigator: SCHEMAS

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
- sakila
- sys
- world

Table Expr... 13- -- Temporary Table 14- -- Stored Procedures SQL File 15 SQL File 16 Task 2 SQL File 18* SQL File 18* Administration - Users and Privil... SQL File 19*

Limit to 1000 rows

```
55 -- 11 Average number of weekend nights for reservations involving children:
56 • SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children
57 FROM reservations
58 WHERE no_of_children > 0;
59
```

Result Grid

avg_weekend_nights_with_children
1.0000

Administration Schemas

Information

No object selected

Object Info Session

Result 1 Result 2 Result 3 Result 4 Result 5 Result 6 Result 7 Result 8 Result 9 Result 10 Result 11 × Result 12 Result 13 Result 14 Result 15 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
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✓ 93	19:18:27	SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS ...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'SCHEMAS' pane shows the 'hotel_reservation' database with a tree view containing 'Tables', 'reservations', 'Views', 'Stored Procedures', and 'Functions'. The 'reservations' table is selected. The main pane displays a SQL query in 'SQL File 19*':

```
-- 12 Number of reservations made in each month of the year:
SELECT MONTH(arrival_date) AS month, COUNT(*) AS reservations_count
FROM reservations
GROUP BY month
ORDER BY month;
```

Below the query, the 'Result Grid' shows the results of the query. The grid has two columns: 'month' and 'reservations_count'. The results are as follows:

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

The bottom of the interface shows the 'Object Info' pane with 'Session' selected, and the 'Query Completed' status bar.

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

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
 - sakila
 - sys
 - world

```
66 -- 13 Average number of nights (both weekend and weekday) spent by guests for each room type:
67 • SELECT room_type_reserved,
68       AVG(no_of_weekend_nights + no_of_week_nights) AS avg_nights
69 FROM reservations
70 GROUP BY room_type_reserved;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

room_type_reserved	avg_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

Administration Schemas

Information

No object selected

Object Info Session

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
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✓ 90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 91	19:18:27	SELECT MONTH(arrival_date) AS month, COUNT(*) AS reservations_count FROM reservat...	12 row(s) returned	0.000 sec / 0.000 sec
✓ 92	19:18:27	SELECT room_type_reserved, AVG(no_of_weekend_nights + no_of_week_nights) AS ...	6 row(s) returned	0.000 sec / 0.000 sec
✓ 93	19:18:27	SELECT room_type_reserved, COUNT(*) AS count, AVG(avg_price_per_room) AS ...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 94	19:18:27	SELECT market_segment_type, AVG(avg_price_per_room) AS avg_price FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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

Filter objects

- hotel_reservation
 - Tables
 - reservations
 - Views
 - Stored Procedures
 - Functions
 - sakila
 - sys
 - world

```
72 -- 14 Most common room type and average price for that room type for reservations involving children:
73 SELECT room_type_reserved,
74        COUNT(*) AS count,
75        AVG(avg_price_per_room) AS avg_price
76 FROM reservations
77 WHERE no_of_children > 0
78 GROUP BY room_type_reserved
79 ORDER BY count DESC
80 LIMIT 1;
81
```

Result Grid

	room_type_reserved	count	avg_price
▶	Room_Type 1	24	123.208333

Administration Schemas

Information

No object selected

Object Info Session

Query Completed

Result 1 Result 2 Result 3 Result 4 Result 5 Result 6 Result 7 Result 8 Result 9 Result 10 Result 11 Result 12 Result 13 Result 14 × Result 14 Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 87	19:18:27	SELECT market_segment_type, COUNT(*) AS count FROM reservations GROUP BY mark...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
✓ 90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

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

The screenshot shows a database management tool interface. The left sidebar displays a tree view of schemas, with 'hotel_reservation' expanded. The main window shows a SQL query in a text editor, which is executed. Below the editor, the 'Result Grid' shows the query results. The bottom section displays the 'Action Output' table, which lists the execution details of the query.

SQL Query:

```
-- 15 Market segment type that generates the highest average price per room:
SELECT market_segment_type,
       AVG(avg_price_per_room) AS avg_price
FROM reservations
GROUP BY market_segment_type
ORDER BY avg_price DESC
LIMIT 1;
```

Result Grid:

market_segment_type	avg_price
Online	112.492278

Action Output:

#	Time	Action	Message	Duration / Fetch
87	19:18:27	SELECT market_segment_type, COUNT(*) AS count FROM reservations GROUP BY mark...	1 row(s) returned	0.000 sec / 0.000 sec
88	19:18:27	SELECT COUNT(*) AS confirmed_reservations FROM reservations WHERE booking_statu...	1 row(s) returned	0.000 sec / 0.000 sec
89	19:18:27	SELECT SUM(no_of_adults) AS total_adults, SUM(no_of_children) AS total_children FROM...	1 row(s) returned	0.000 sec / 0.000 sec
90	19:18:27	SELECT AVG(no_of_weekend_nights) AS avg_weekend_nights_with_children FROM reser...	1 row(s) returned	0.000 sec / 0.000 sec

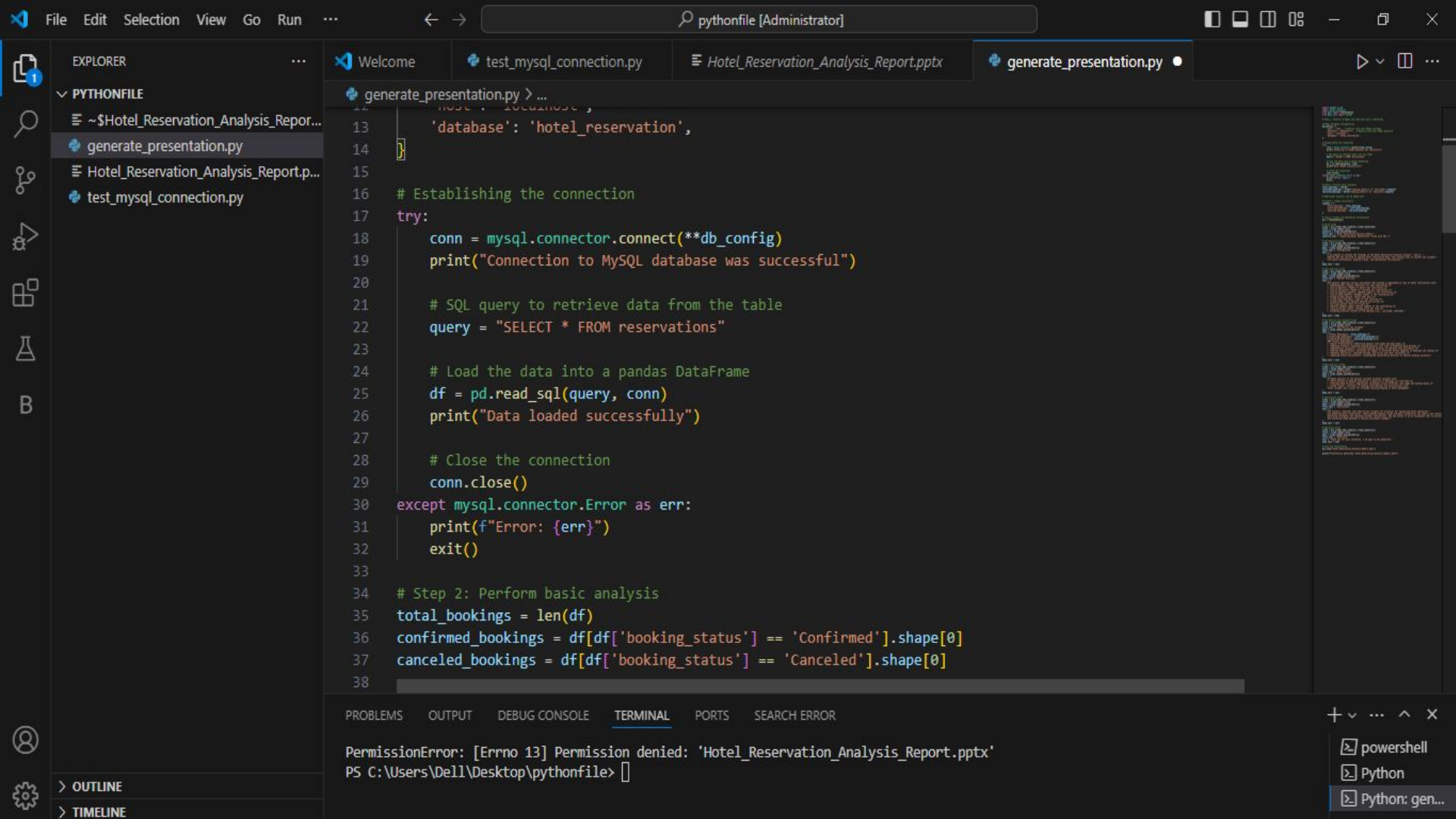
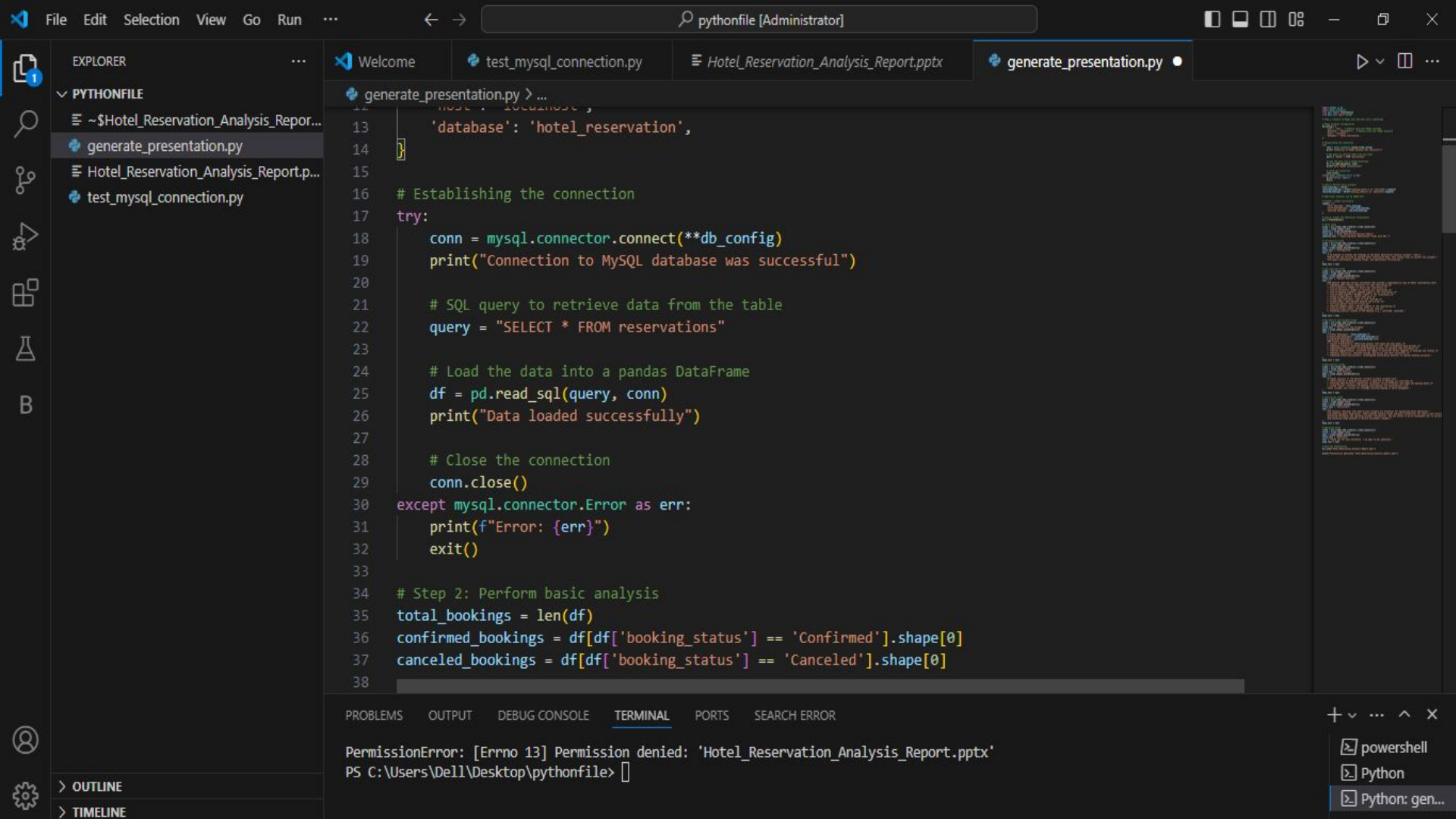




Photo by Pexels

Key Findings :

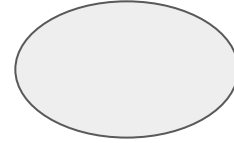
The analysis highlights key findings and recommendations for hotel management:

- Understanding guest preferences can lead to tailored offerings and increased satisfaction.
- Identifying booking trends helps in resource management and enhancing the guest experience.
- Analyzing booking data improves operational efficiency and revenue management.
- Market segmentation insights aid in targeted marketing strategies.
- Revenue analysis informs dynamic pricing strategies.
- Evaluating booking cancellations helps in refining policies and stabilizing revenue streams.



Photo by Pexels

Recommendations:

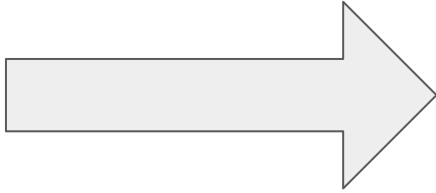


Develop targeted marketing campaigns and personalize guest experiences.

- Implement dynamic pricing models and optimize operational planning.
- Review booking policies to reduce cancellation rates.

Value of Data Analysis:

- Data-driven decision-making improves operational efficiency, guest satisfaction, and revenue management.
- Understanding market dynamics provides a strategic advantage in a competitive market.
- Continual use of data analysis tools drives innovation and ensures responsiveness to changing market conditions and guest expectations, fostering sustainable growth and success.



Conclusions

The analysis indicates that data-driven insights are essential for optimizing hotel operations and enhancing guest experiences. Understanding booking trends and guest preferences can lead to more effective marketing strategies and improved customer satisfaction. SQL has proven to be an invaluable tool in extracting and analyzing large datasets to derive actionable insights.