**Source Code**

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

SELECT COUNT(\*) AS Total\_Reservation FROM hotel\_reservation;

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

SELECT type\_of\_meal\_plan, COUNT(Booking\_ID) AS Total\_Guests

FROM hotel\_reservation

GROUP BY type\_of\_meal\_plan

ORDER BY Total\_Guests DESC

LIMIT 1;

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

SELECT ROUND (AVG (avg\_price\_per\_room), 2) AS "Avg Price per Room involving children"

FROM hotel\_reservation

WHERE no\_of\_children > 0;

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

SELECT

COUNT(Booking\_ID) AS Total\_Reservation, YEAR(arrival\_date) AS Years

FROM

hotel\_reservation

WHERE

YEAR(arrival\_date) IN (2017, 2018)

GROUP BY

Years;

/\*\*5. What is the most commonly booked room type?\*\*/

SELECT room\_type\_reserved, COUNT(room\_type\_reserved) AS Total\_Bookings

FROM hotel\_reservation

GROUP BY room\_type\_reserved

ORDER BY Total\_Bookings DESC;

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

SELECT COUNT(Booking\_ID) AS weekend\_reservation

FROM hotel\_reservation

WHERE no\_of\_weekend\_nights > 0;

/\*\*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\_reservation;

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

SELECT market\_segment\_type, COUNT(Booking\_ID) AS "Total Reservation"

FROM hotel\_reservation

GROUP BY market\_segment\_type

ORDER BY COUNT(Booking\_ID) DESC;

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

SELECT COUNT(Booking\_ID) AS "Confirmed Reservation"

FROM hotel\_reservation

WHERE booking\_status = "Not\_Canceled";

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

SELECT SUM(no\_of\_adults) AS "Number of Adults", SUM(no\_of\_children) AS "Number of Children"

FROM hotel\_reservation;

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

SELECT AVG(no\_of\_weekend\_nights) AS "Avg Weekend Nights with Children"

FROM hotel\_reservation

WHERE no\_of\_children > 0;

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

SELECT MONTH(arrival\_date) AS Months, COUNT(Booking\_ID) AS "Total Reservation"

FROM hotel\_reservation

GROUP BY Months

ORDER BY Months;

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

SELECT room\_type\_reserved AS "Room Type", ROUND(AVG(no\_of\_weekend\_nights + no\_of\_week\_nights), 2) AS "Avg Night"

FROM hotel\_reservation

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?\*\*/

SELECT room\_type\_reserved AS "Most Common Room Type", ROUND(AVG(avg\_price\_per\_room), 2) AS "Avg Price"

FROM hotel\_reservation

WHERE no\_of\_children > 0

GROUP BY room\_type\_reserved

ORDER BY ROUND(AVG(avg\_price\_per\_room), 2) DESC

LIMIT 1;

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

SELECT market\_segment\_type, ROUND(AVG(avg\_price\_per\_room), 2) AS "Avg Price"

FROM hotel\_reservation

GROUP BY market\_segment\_type

ORDER BY AVG(avg\_price\_per\_room) DESC;