

REQUIREMENTS

1. **How many records are there in the dataset?**
 - Use `COUNT(*)` function.
 - Select from the main table.
2. **How many unique cities are in the European dataset?**
 - Use `COUNT(DISTINCT)` function.
 - Apply it to the `CITY` column.
3. **What are the names of the cities in the dataset?**
 - Use `DISTINCT` keyword.
 - Select from the `CITY` column.
4. **How many bookings are there in each city?**
 - Use `COUNT(*)` function.
 - Group by `CITY`.
 - Order results descending.
5. **What is the total booking revenue for each city?**
 - Use `SUM()` function on the `PRICE` column.
 - Group by `CITY`.
 - Round the result.
 - Order by total revenue descending.
6. **What is the average guest satisfaction score for each city?**
 - Use `AVG()` function on `GUEST_SATISFACTION` column.
 - Group by `CITY`.
 - Round the result.
 - Order by average score descending.
7. **What are the minimum, maximum, average, and median booking prices?**
 - Use `MIN()`, `MAX()`, and `AVG()` functions on `PRICE` column.
 - Use `ntile()` for the median.
 - Round results.
8. **How many outliers are there in the price field?**
 - Calculate Q1, Q3, and IQR using `ntile()`.
 - Define lower and upper bounds.
 - Count records outside these bounds.
9. **What are the characteristics of the outliers in terms of room type, number of bookings, and price?**
 - Create a view or CTE for outliers.
 - Group by `ROOM_TYPE`.
 - Use `COUNT()`, `MIN()`, `MAX()`, and `AVG()` functions.
10. **How does the average price differ between the main dataset and the dataset with outliers removed?**
 - Create a view for cleaned data (without outliers).

- Calculate the average price for both datasets.
- Compare results.

11. What is the average price for each room type?

- Use `AVG()` function on `PRICE` column.
- Group by `ROOM_TYPE`.

12. How do weekend and weekday bookings compare in terms of average price and number of bookings?

- Group by `DAY` column.
- Use `AVG()` for price and `COUNT()` for bookings.

13. What is the average distance from metro and city center for each city?

- Use `AVG()` on `METRO_DISTANCE_KM` and `CITY_CENTER_KM` columns.
- Group by `CITY`.

14. How many bookings are there for each room type on weekdays vs weekends?

- Use `CASE` statements to categorize room types.
- Group by `DAY` and `ROOM_TYPE`.

15. What is the booking revenue for each room type on weekdays vs weekends?

- Similar to the previous question, but use `SUM()` on `PRICE` instead of `COUNT()`.

16. What is the overall average, minimum, and maximum guest satisfaction score?

- Use `AVG()`, `MIN()`, and `MAX()` functions on `GUEST_SATISFACTION` column.

17. How does guest satisfaction score vary by city?

- Group by `CITY`.
- Use `AVG()`, `MIN()`, `MAX()` on `GUEST_SATISFACTION` column.

19. What is the average booking value across all cleaned data?

- Use `AVG()` function on `PRICE` column from cleaned data view.

20. What is the average cleanliness score across all cleaned data?

- Use `AVG()` function on `CLEANINGNESS_RATING` column from cleaned data.

21. How do cities rank in terms of total revenue?

- Use `SUM()` on `PRICE` column.
- Group by `CITY`.
- Use window function `ROW_NUMBER()` to assign ranks.