HOTEL RESERVATION ANALYSIS – MIP-DA-10

1.
```
SELECT COUNT(Booking_ID) AS TOTAL_NO_OF_RESERVATION FROM [Hotel Reservation Dataset3];
```
TOTAL_NO_OF_RESERVATION

700

2.
```
SELECT type_of_meal_plan, COUNT(Booking_ID) AS Total_no_of_meal_Reservations
FROM [Hotel Reservation Dataset3]
GROUP BY type_of_meal_plan;
```

type_of_meal_plan	Total_no_of_meal_Reservations
Meal Plan 1	527
Meal Plan 2	64
Not Selected	109

Meal plan 1 is most popular.

3.
```
SELECT AVG(avg_price_per_room) AS Average_price_per_Childrensroom FROM [Hotel Reservation Dataset3]
WHERE no_of_children > 0;
```
Average price per room = **144.57**

4.
```
SELECT COUNT(Booking_ID) AS Reservations_in_2018 FROM [Hotel Reservation Dataset3]
WHERE arrival_date >= '2018-01-01';
```
Ans =577

5.
```
SELECT room_type_reserved, COUNT(Booking_ID) AS Total_no_of_room_type_Reservations
FROM [Hotel Reservation Dataset3]
GROUP BY room_type_reserved
ORDER BY Total_no_of_room_type_Reservations DESC;
```

room_type_reserved	Total_no_of_room_type_Reservations
Room_Type 1	534
Room_Type 4	130
Room_Type 6	18
Room_Type 2	8
Room_Type 7	6
Room_Type 5	4

Most common room is Room type 1

6.
```
SELECT COUNT(Booking_ID) AS No_of_reservations
FROM [Hotel Reservation Dataset3]
WHERE no_of_weekend_nights > 0;
```

Ans: 383

7.
```
SELECT MAX(lead_time) AS MAIMUM_LEAD_TIME, MIN(lead_time) AS MINIMUM_LEAD_TIME
FROM [Hotel Reservation Dataset3];
```

MAIMUM_LEAD_TIME	MINIMUM_LEAD_TIME
443	0

8.
```
SELECT market_segment_type, COUNT(Booking_ID) AS No_of_reservations
FROM [Hotel Reservation Dataset3]
GROUP BY market_segment_type
ORDER BY No_of_reservations DESC;
```

Online -558 reservations

```
9. SELECT COUNT(Booking_ID) AS No_of_reservations
FROM [Hotel Reservation Dataset3]
WHERE booking_status = 'Confirmed'
```

Ans =0

```
10. SELECT SUM(no_of_adults) AS Total_adults,
       SUM(no_of_children) AS Total_children
       FROM [Hotel Reservation Dataset3];
```

Ans:

Total_adults	Total_children
1316	69

11.
```
SELECT AVG(no_of_weekend_nights) AS Avg_Weekend_Nights_With_Children
FROM [Hotel Reservation Dataset3]
WHERE no_of_children > 0;
```
Ans = 1

12.
```
SELECT DATEPART(MONTH, arrival_date) AS Month,
    COUNT(*) AS Reservations_Count
       FROM [Hotel Reservation Dataset3]
GROUP BY DATEPART(MONTH, arrival_date)
ORDER BY Month;
13.
```

Month	Reservations_Count
January	11
February	28
March	52
April	67
May	55
June	84
July	44
August	70
September	80
October	103
November	54
December	52

13.
```
SELECT
    room_type_reserved AS Room_Type,
    AVG(no_of_weekend_nights + no_of_week_nights) AS Avg_Total_Nights
FROM [Hotel Reservation Dataset3]
GROUP BY
        room_type_reserved;
```

Room_Type	Avg_Total_Nights
Room_Type 1	2
Room_Type 2	3
Room_Type 4	3
Room_Type 5	2
Room_Type 6	3
Room_Type 7	2

14.
```
SELECT
    room_type_reserved AS Common_Room_Type,
    COUNT(*) AS Reservation_Count,
    AVG(avg_price_per_room) AS Avg_Price
FROM [Hotel Reservation Dataset3]
WHERE
    no_of_children > 0
GROUP BY
    room_type_reserved
ORDER BY
    Reservation_Count DESC;
```

Most common room type with children = Room type 1 with an average price of 123.12

15.
```
SELECT market_segment_type AS Market_Segment,
   AVG(avg_price_per_room) AS Avg_Price_Per_Room
FROM [Hotel Reservation Dataset3]
GROUP BY market_segment_type
ORDER BY Avg_Price_Per_Room DESC;
```
Ans: Online Avg Price = 112.46