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Batch – MIP-DA-04

Project -Hotel Reservation Analysis with SQL

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

Query :

```
SELECT SUM(Totel_reservation) AS total_reservations
FROM hotel_reservation.`hotel reservation dataset`;
ALTER TABLE hotel_reservation.`hotel reservation dataset`
DROP COLUMN Totel_reservation;
ALTER TABLE hotel_reservation.`hotel reservation dataset`
ADD Totel_reservation smallint;
UPDATE hotel_reservation.`hotel reservation dataset`
SET Totel_reservation = no_of_adults + no_of_children;
```

2.meal plan is the most popular among guests?

Query:

```
select type_of_meal_plan, count(*) as most_preferred_meal
from hotel_reservation.`hotel reservation dataset`
group by type_of_meal_plan
order by most_preferred_meal desc
```

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

Query:

```
SELECT AVG(avg_price_per_room) AS average_value_no_of_children
FROM hotel_reservation.`hotel reservation dataset`
WHERE no_of_children > 0;
```

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

```
SELECT COUNT(*) AS total_reservations
FROM hotel_reservation.`hotel reservation dataset`
WHERE YEAR(arrival_date) = 2020;
```

5.What is the most commonly booked room type?

Query :

```
SELECT * FROM hotel_reservation.`hotel reservation dataset`;

Select      room_type_reserved,      count(*)      as
room_type_reserved_By_customer
from hotel_reservation.`hotel reservation dataset`
group by room_type_reserved
order by  room_type_reserved_By_customer desc
limit 1
```

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

Query:

```
SELECT COUNT(*) AS weekend_reservations
FROM hotel_reservation.`hotel reservation dataset`
WHERE no_of_weekend_nights > 0;
```

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

Query:

```
SELECT  max(lead_time)as  Max_lead_time  ,  min(lead_time)  as
Min_lead_time
```

FROM hotel_reservation.`hotel reservation dataset`

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

Query :

```
SELECT market_segment_type as most_perefer_segment_type
FROM hotel_reservation.`hotel reservation dataset`
group by market_segment_type
order by most_perefer_segment_type desc
limit 1
```

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

Query :

```
SELECT booking_status ,count(*)as confirm
FROM hotel_reservation.`hotel reservation dataset`
group by booking_status
order by confirm
limit 1 ,1;
```

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

Query:

```
SELECT sum(no_of_adults) as adults,sum(no_of_children) as children
FROM hotel_reservation.`hotel reservation dataset`
```

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

Query:

```
SELECT      no_of_children      ,avg(no_of_weekend_nights)      as
avg_no_of_weekend_night

FROM hotel_reservation.`hotel reservation dataset`

group by no_of_children
```

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

Query :

```
SELECT
EXTRACT(YEAR from arrival_date )AS reservation_year,
EXTRACT(month from arrival_date ) AS reservation_month,
COUNT(arrival_date) AS reservations_count
FROM
hotel_reservation.`hotel reservation dataset`
```

```
GROUP BY
arrival_date,
arrival_date
ORDER BY
reservation_month,
reservation_year;
```

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

Query :

```
SELECT      room_type_reserved,      avg(no_of_weekend_nights)      as
weekend_night ,
avg(no_of_week_nights) as week_nights
```

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

Query :

```
SELECT    room_type_reserved,    avg(no_of_weekend_nights)    as
weekend_night ,
avg(no_of_week_nights) as week_nights
FROM hotel_reservation.`hotel reservation dataset`
group by room_type_reserved ;
```

15. 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,
AVG(avg_price_per_room) AS avg_price
FROM
`hotel_reservation`.`hotel reservation dataset`
WHERE
no_of_children > 0
GROUP BY
room_type_reserved
order by
count(*) desc
limit 1;
```