Source Code :

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

```
SELECT * FROM hotel_reservations.reservations;

SELECT COUNT(*) FROM hotel_reservations.reservations WHERE booking_status =
'Not_Canceled';
```

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

```
SELECT type_of_meal_plan AS Mode, COUNT(*) AS Count

FROM reservations

GROUP BY type_of_meal_plan

HAVING COUNT(*) >= ALL (SELECT COUNT(*) FROM hotel_reservations.reservations GROUP BY
type_of_meal_plan);
```

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

```
SELECT avg(avg_price_per_room) FROM hotel_reservations.reservations WHERE no_of_children > 0
and

 booking_status = 'Not_Canceled';
```

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

```
SELECT count(*) FROM hotel_reservations.reservations WHERE arrival_date LIKE '_____2017'

and booking_status = 'Not_Canceled';
```

#5. What is the most commonly booked room type?

```
SELECT room_type_reserved AS Mode, COUNT(*) AS Count

FROM reservations

GROUP BY room_type_reserved

HAVING COUNT(*) >= ALL (SELECT COUNT(*) FROM hotel_reservations.reservations GROUP BY
room_type_reserved);
```

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

```
SELECT count(*) FROM hotel_reservations.reservations WHERE no_of_weekend_nights > 0
and booking_status = 'Not_Canceled';
```

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

```
SELECT max(lead_time) FROM hotel_reservations.reservations WHERE booking_status =
'Not_Canceled';
SELECT min(lead_time) FROM hotel_reservations.reservations WHERE booking_status =
'Not_Canceled';
```

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

```
SELECT market_segment_type AS Mode, COUNT(*) AS Count
FROM reservations
GROUP BY market_segment_type
HAVING COUNT(*) >= ALL (SELECT COUNT(*) FROM hotel_reservations.reservations GROUP BY
market_segment_type);
```

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

```
#in case you mean the word 'Confirmed' :
SELECT count(*) FROM hotel_reservations.reservations WHERE booking_status = 'Confirmed';
#in case you mean reservations that were not canceled :
SELECT count(*) FROM hotel_reservations.reservations WHERE booking_status = 'Not_Canceled';
```

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

```
SELECT sum(no_of_adults) + sum(no_of_children) FROM hotel_reservations.reservations
WHERE booking_status = 'Not_Canceled';
```

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

```
SELECT avg(no_of_weekend_nights) FROM hotel_reservations.reservations
```

```
WHERE no_of_children > 0 and booking_status = 'Not_Canceled';
```

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

```
SELECT
  room_type_reserved,
  AVG(no_of_weekend_nights + no_of_week_nights) AS avg_nights
FROM
  reservations
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,
  COUNT(*) AS reservation_count
FROM
  reservations
WHERE
  no_of_children > 0
GROUP BY
  room_type_reserved
ORDER BY
  reservation_count DESC
LIMIT 1;

SELECT
```

```
  avg(avg_price_per_room) as price
FROM
  reservations
WHERE
  room_type_reserved = 'Room_Type 1'
  AND no_of_children > 0;
```

#15. Find the 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;
```