SOURCE CODE
SQL QUERY FOR HOTEL RESERVATION ANALYSIS

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

```
SELECT count(Booking_ID)
FROM hotel_reservation_dataset
```

Q2.) Which meal plan is the most popular among guests?

```
SELECT type_of_meal_plan, count(*) AS popular_meal
FROM hotel_reservation_dataset
GROUP BY type_of_meal_plan
ORDER BY popular_meal DESC
LIMIT 1;
```

Q3.) What is the average price per room for reservations involving children?

```
SELECT ROUND(AVG(avg_price_per_room),2) AS avg_price_per_room
FROM hotel_reservation_dataset
WHERE no_of_children > 0 ;
```

Q4.) How many reservations were made for the year 20XX (replace XX with the desired year)?

```
SELECT substring(arrival_date,-4) AS  year ,
count(*) AS reservation_count
FROM  hotel_reservation_dataset
GROUP BY year;
```

Q5.)What is the most commonly booked room type?

```
SELECT room_type_reserved,
COUNT(room_type_reserved) as booked_room_count
FROM hotel_reservation_dataset
GROUP BY room_type_reserved
ORDER BY booked_room_count DESC
```

Q6.)How many reservations fall on a weekend (no_of_weekend_nights > 0)?

```
SELECT count(*) AS total_booking_on_weekend
FROM hotel_reservation_dataset
WHERE no_of_weekend_nights > 0
```

Q7.)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_dataset
```

Q8.)What is the most common market segment type for reservations?

```
SELECT market_segment_type,
       count(*) AS segment_type_count
FROM hotel_reservation_dataset
GROUP BY market_segment_type
ORDER BY segment_type_count DESC
LIMIT 1;
```

Q9.)How many reservations have a booking status of "Confirmed"?

```
SELECT count(booking_status) as booking_status
FROM hotel_reservation_dataset
WHERE booking_status ="Not_Canceled"
```

Q10.)What is the total number of adults and children across all reservations?

```
SELECT sum(no_of_adults) AS total_adults,
        sum(no_of_children) AS total_children
FROM hotel_reservation_dataset
```

Q11.)What is the average number of weekend nights for reservations involving children?

```
SELECT round(avg(no_of_weekend_nights),2) AS
avg_weekend_night_for_chlidren
FROM hotel_reservation_dataset
WHERE no_of_children>0
```

Q12.)How many reservations were made in each month of the year?

```
SELECT month(str_to_date(arrival_date,'%d-%m-%Y')) AS month,
        count(*) AS total_reservation
FROM hotel_reservation_dataset
GROUP BY  month(str_to_date(arrival_date,'%d-%m-%Y'))
ORDER BY month;
```

Q13.)What is the average number of nights (both weekend and weekday) spent by guests for each room type?

```
SELECT room_type_reserved,
        round(avg(no_of_week_nights + no_of_weekend_nights),2) AS
total_nights
FROM hotel_reservation_dataset
GROUP BY room_type_reserved
ORDER BY room_type_reserved
```

Q14.)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 total_reservation,
        round(avg(avg_price_per_room),2) AS avg_price_per_room
FROM hotel_reservation_dataset
WHERE no_of_children >0
GROUP BY room_type_reserved
ORDER BY count(*) DESC
LIMIT 1 ;
```

Q15.)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   highest_avg_price_per_room
FROM hotel_reservation_dataset
GROUP BY market_segment_type
ORDER BY highest_avg_price_per_room desc
limit 1;
```