MENTORNESS INTERNSHIP

Agenda

- 1.) IMPORTING THE CSV FILE INTO DATA TOOL (POSTGRESQL)
- 2.) RETRIEVE VALUABLE INSIGHTS FROM THE GIVEN DATA

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

select count(*) as total_res from hotel;

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

```
select type_of_meal, count(*) as meal_count from hotel where type_of_meal in ('Meal Plan 1', 'Meal Plan 2', 'Not Selected') group by type_of_meal order by meal_count desc;
```

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

select round(avg(avg_price),2) as average_price_per_room from hotel 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(*) as num_reservations from hotel where extract(year from arrival_date) = 2017 and booking _status = 'Not_Canceled'; --5. What is the most commonly booked room type?

```
select room_type_reserved, count(*) as most_booked from hotel where room_type_reserved in ('Room_Type 1', 'Room_Type 2', 'Room_Type 3', 'Room_Type 4', 'Room_Type 5', 'Room_Type 6', 'Room_Type 7') group by room_type_reserved
```

order by most_booked desc;

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

select no_of_weekend, count(*) as no_of_reservations from hotel where no_of_weekend > 0 group by no_of_weekend

order by no_of_reservations desc;

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

```
select max(lead_time) as highest_time, min(lead_time) as lowest_time
from hotel
where booking_status = 'Not_Canceled';
```

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

select market_segment, count(*) as most_common_type from hotel group by market_segment order by most_common_type desc limit 1; --9. How many reservations have a booking status of "Confirmed"?

select booking_status, count(*) as confirmed from hotel group by booking_status order by booking_status desc;

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

select sum(no_of_children) as total_children, sum(no_of_adults) as total_adults from hotel where booking_status = 'Not_Canceled';

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

```
select Round(avg(no_of_weekend),2) as
avg_no_of_weekend_nights
from hotel
where booking_status in ('Not_Canceled') and
no_of_children > 0;
```

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

```
select
  DATE_PART('year', arrival_date) as year,
  DATE_PART('month', arrival_date) as month,
  count(*) as num_reservations
from hotel
where booking_status = 'Not_Canceled'
group by DATE_PART('year', arrival_date),
DATE_PART('month', arrival_date)
order by year, month;
```

--13. 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_weekend + no_of_week),2) as avg_total_nights from hotel 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 num_reservations from hotel
- where no_of_children > 0 and booking_status =
- 'Not_Canceled'
- group by room_type_reserved
- order by num_reservations desc
- limit 1;

--15. Find the market segment type that generates the highest average price per room.

select market_segment, avg(avg_price) as avg_price_per_room from hotel group by market_segment order by avg_price_per_room desc LIMIT 1;

THANK YOU