

### **Rows and Columns**

```
SELECT * FROM sessions
ORDER BY RANDOM()
LIMIT 100;
```

```
--num count
SELECT
COUNT(session_id)
FROM sessions
```

```
SELECT *
FROM information_schema.columns
WHERE table_name = 'sessions'
```

```
SELECT COUNT(*),
COUNT(DISTINCT trip_id) AS distinct_trip
From flights
```

```
SELECT COUNT(*)
FROM information_schema.columns
WHERE table_name = 'flights'
```

### **Joined\_Table**

```
WITH joined_table AS(
SELECT *
FROM sessions s
LEFT JOIN users u
ON s.user_id=u.user_id
LEFT JOIN flights f
ON s.trip_id=f.trip_id
LEFT JOIN hotels h
ON s.trip_id=h.trip_id
WHERE s.session_start > '2023-01-04'
)
--SELECT COUNT(*)
--FROM joined_table
```

```
SELECT *
FROM joined_table
ORDER BY RANDOM()
LIMIT 1000
```

```

SELECT
  u.user_id,
  COUNT(s.trip_id) AS total_bookings,
  COUNT(CASE WHEN s.cancellation = TRUE THEN 1 END) AS cancellations,
  AVG(b.price) AS avg_booking_value,
  COUNT(DISTINCT b.destination) AS unique_destinations
FROM users u
LEFT JOIN b ON u.user_id = b.user_id
GROUP BY u.user_id;

```

### **Sessions\_Base Table**

```

WITH session_2023 AS(
  SELECT *
  FROM sessions s
  WHERE s.session_start > '2023-01-04'),
filtered_user AS(
  SELECT user_id, COUNT(*)
  FROM session_2023 s
  GROUP BY user_id
  HAVING COUNT (*)>7),
session_base_table AS(
  SELECT s.session_id, s.user_id, s.trip_id, s.session_start, s.session_end, s.page_clicks,
  s.flight_discount, s.flight_discount_amount, s.hotel_discount, s.hotel_discount_amount,
  s.flight_booked, s.hotel_booked, s.cancellation,
  u.birthdate, u.gender, u.married, u.has_children, u.home_country, u.home_city, u.home_airport,
  u.home_airport_lat, u.home_airport_lon, u.sign_up_date,
  f.origin_airport, f.destination, f.destination_airport, f.seats, f.return_flight_booked,
  f.departure_time, f.return_time, f.checked_bags, f.trip_airline, f.destination_airport_lat,
  f.destination_airport_lon, f.base_fare_usd,
  h.hotel_name, h.nights, h.rooms, h.check_in_time, h.check_out_time, h.hotel_per_room_usd
  FROM session_2023 s
  LEFT JOIN users u
  ON s.user_id=u.user_id
  LEFT JOIN flights f
  ON s.trip_id=f.trip_id
  LEFT JOIN hotels h
  ON s.trip_id=h.trip_id
  WHERE s.user_id IN (SELECT user_id FROM filtered_user))
  SELECT *
  FROM session_base_table
  WHERE nights<0

```