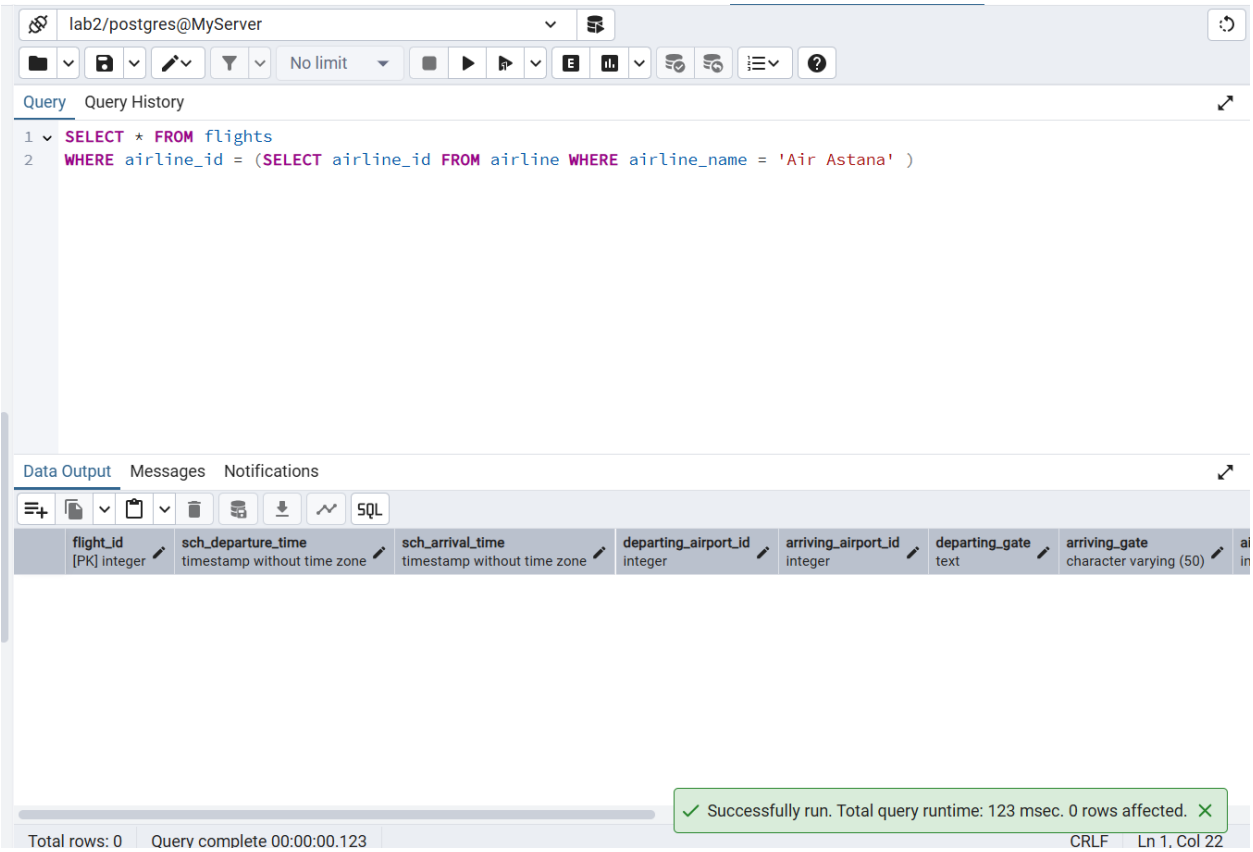
Lab 6 database. Abdykamat Adilet

1. Write a query that displays all flights of a specific airline.

SELECT * FROM flights

WHERE airline_id = (SELECT airline_id FROM airline WHERE airline_name = 'Air Astana')



2. Compose a query to obtain a list of all flights with the names of departure airports.

SELECT f.flight_id, a.airline_name, dep.airport_name AS dep_airport

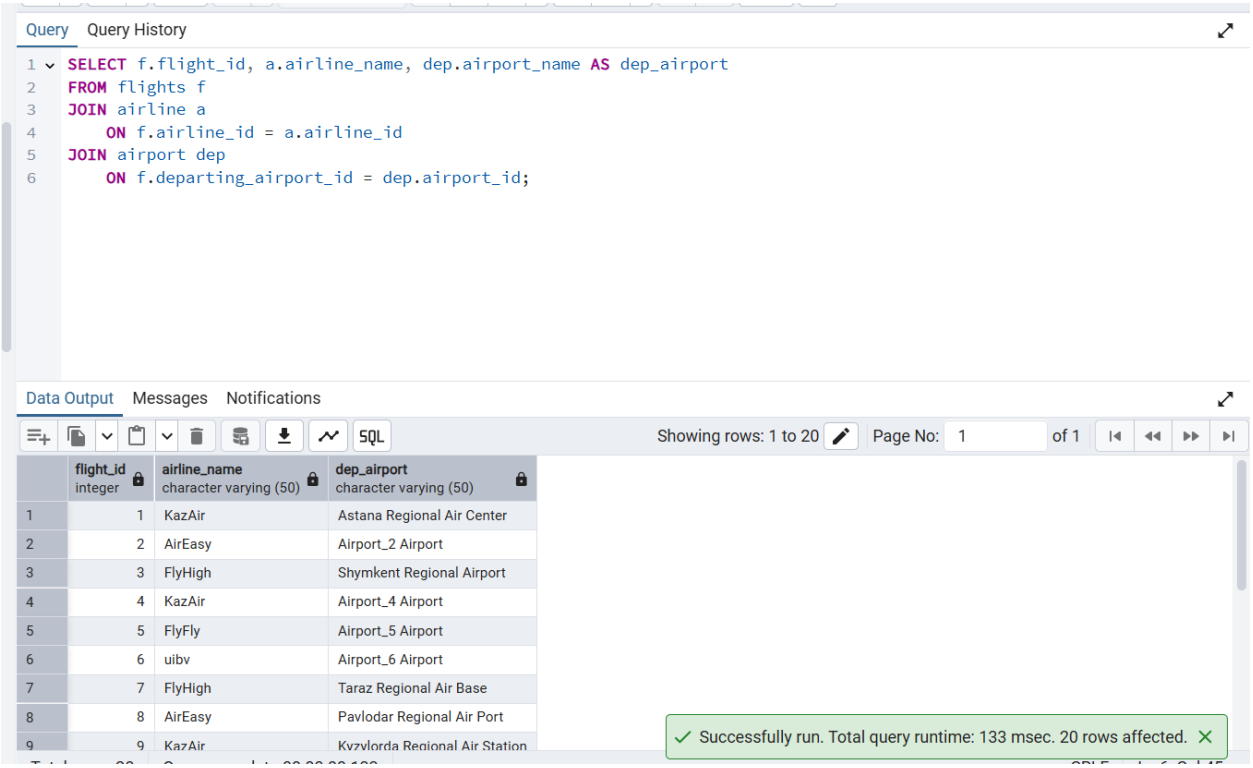
FROM flights f

JOIN airline a

ON f.airline_id = a.airline_id

JOIN airport dep

ON f.departing_airport_id = dep.airport_id;



3. Create a query that finds all airlines that have no flights scheduled for the next month.

SELECT a.airline_name FROM airline a

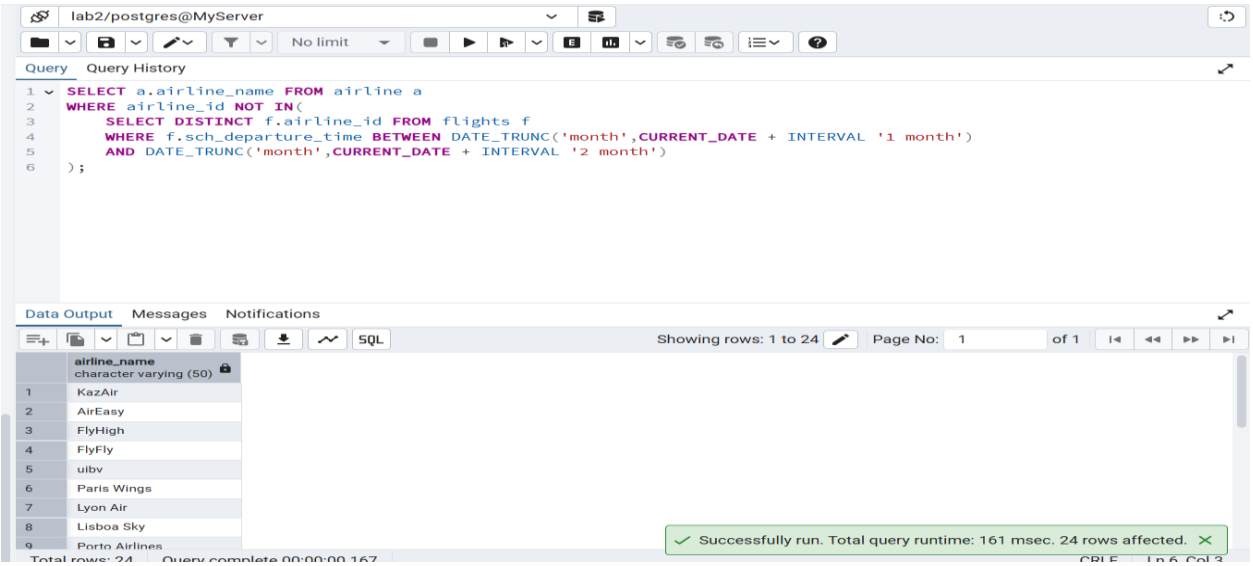
WHERE airline_id NOT IN(

SELECT DISTINCT f.airline_id FROM flights f

WHERE f.sch_departure_time BETWEEN DATE_TRUNC('month',CURRENT_DATE + INTERVAL '1 month')

AND DATE_TRUNC('month',CURRENT_DATE + INTERVAL '2 month')

);

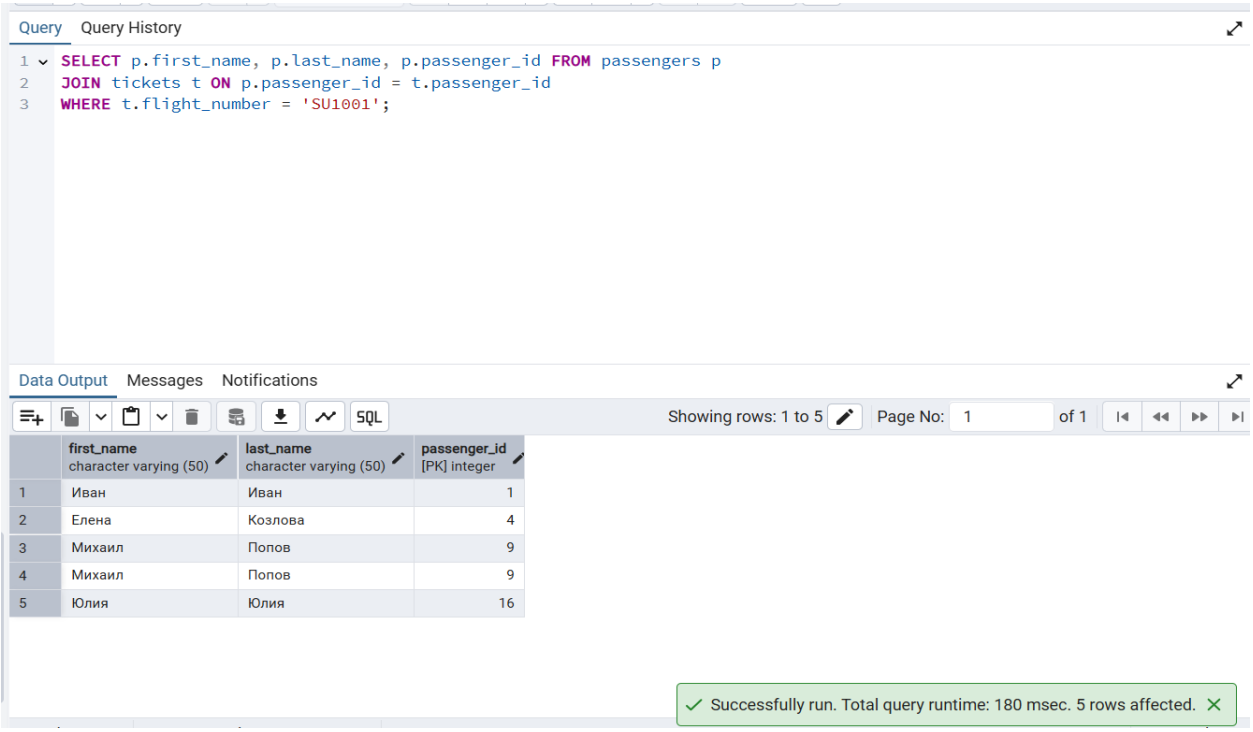


4. Create a query to display a list of passengers on a specific flight.

SELECT p.first_name, p.last_name, p.passenger_id FROM passengers p

JOIN tickets t ON p.passenger_id = t.passenger_id

WHERE t.flight_number = 'SU1001';



5. Write a query that calculates the average, total, maximum and minimum price of tickets for each flight.

SELECT flight_number,

AVG(price) as Average_price,

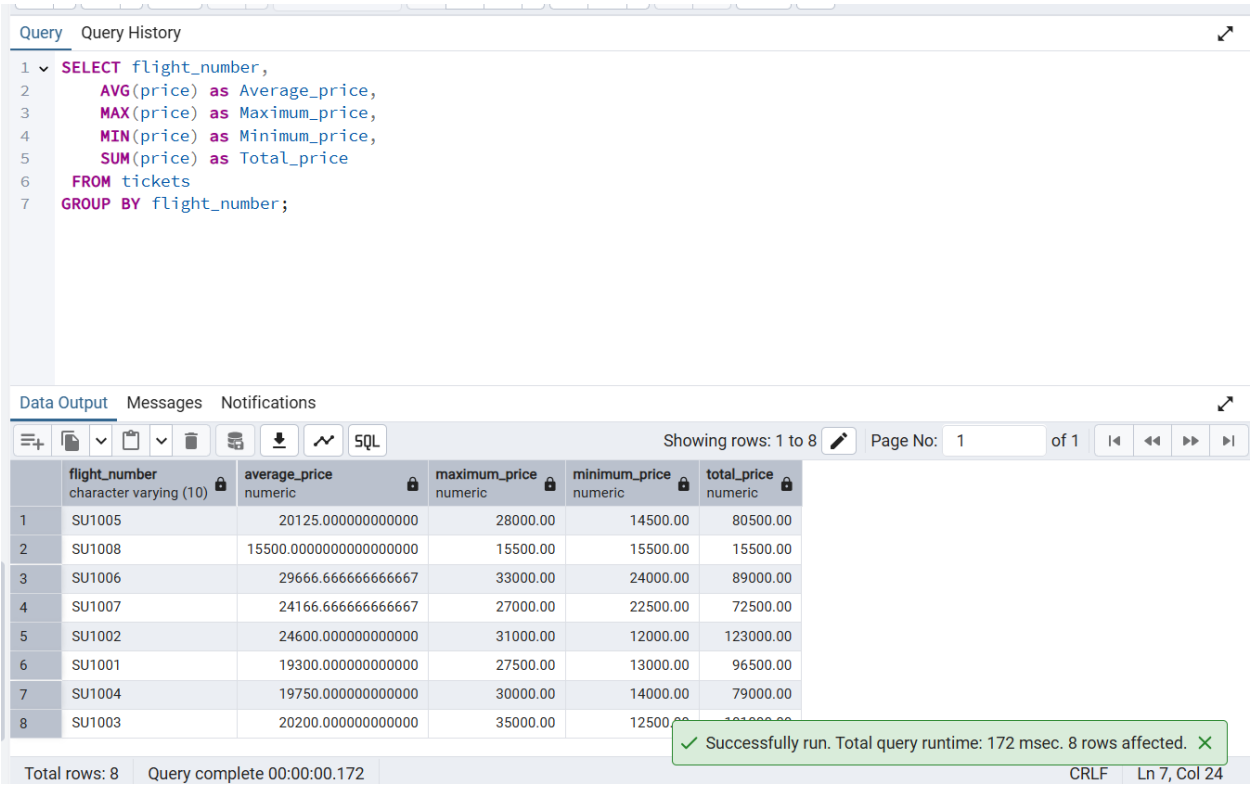
MAX(price) as Maximum_price,

MIN(price) as Minimum_price,

SUM(price) as Total_price

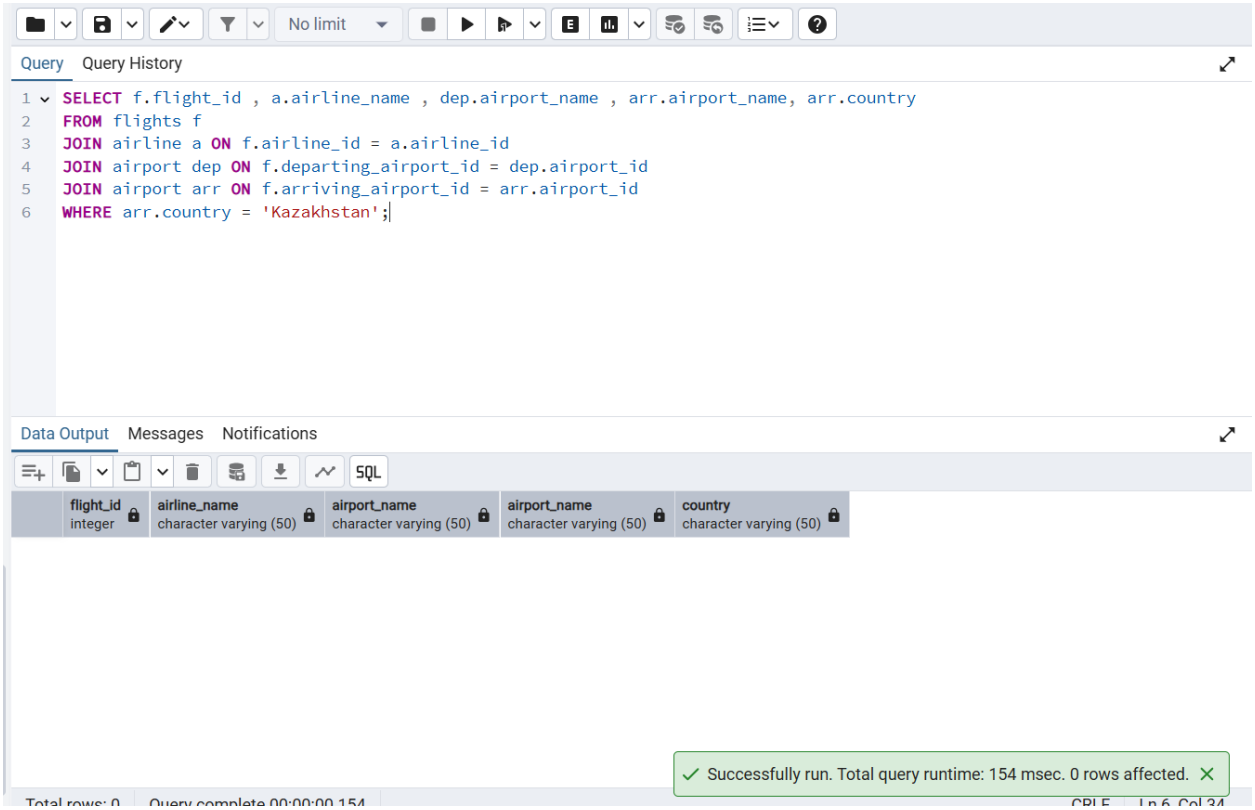
FROM tickets

GROUP BY flight_number;



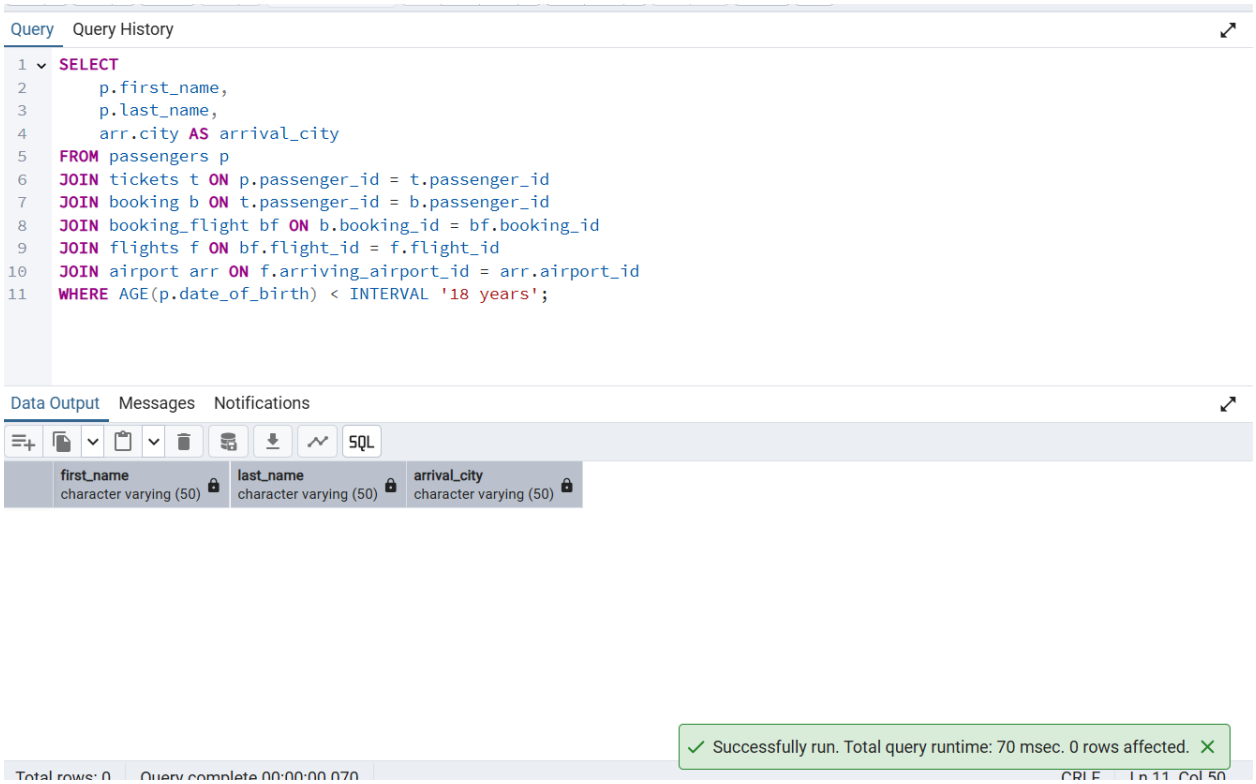
6. Create a query that shows all flights flying to a specific country by combining flights, airports and airline, and using the condition on the country name.

```
SELECT f.flight_id , a.airline_name , dep.airport_name , arr.airport_name, arr.country
FROM flights f
JOIN airline a ON f.airline_id = a.airline_id
JOIN airport dep ON f.departing_airport_id = dep.airport_id
JOIN airport arr ON f.arriving_airport_id = arr.airport_id
WHERE arr.country = 'Kazakhstan';
```



7. Display a list of minor passengers and their arrival destination.

```
SELECT
    p.first_name,
    p.last_name,
    arr.city AS arrival_city
FROM passengers p
JOIN tickets t ON p.passenger_id = t.passenger_id
JOIN booking b ON t.passenger_id = b.passenger_id
JOIN booking_flight bf ON b.booking_id = bf.booking_id
JOIN flights f ON bf.flight_id = f.flight_id
JOIN airport arr ON f.arriving_airport_id = arr.airport_id
WHERE AGE(p.date_of_birth) < INTERVAL '18 years';
```



8. Display the passenger's full name, passport number, and the passenger's current time of arrival at the destination.

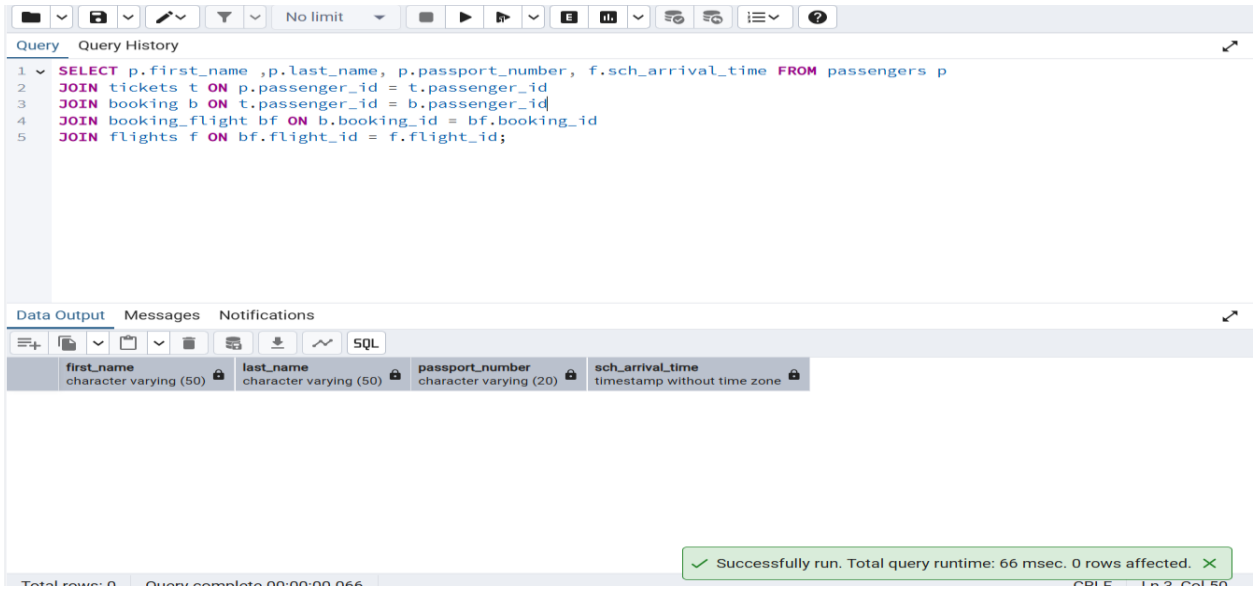
SELECT p.first_name ,p.last_name, p.passport_number, f.sch_arrival_time FROM passengers p

JOIN tickets t ON p.passenger_id = t.passenger_id

JOIN booking b ON t.passenger_id = b.passenger_id

JOIN booking_flight bf ON b.booking_id = bf.booking_id

JOIN flights f ON bf.flight_id = f.flight_id;



9. Print a list of flights where the airline's home country and origin country are the same. Group them by the airport country.

SELECT f.flight_id, a.airline_name, dep.country FROM flights f

JOIN airline a ON f.airline_id = a.airline_id

JOIN airport dep ON f.departing_airport_id = dep.airport_id

WHERE a.airline_country = dep.country

GROUP BY f.flight_id, a.airline_name, dep.country;