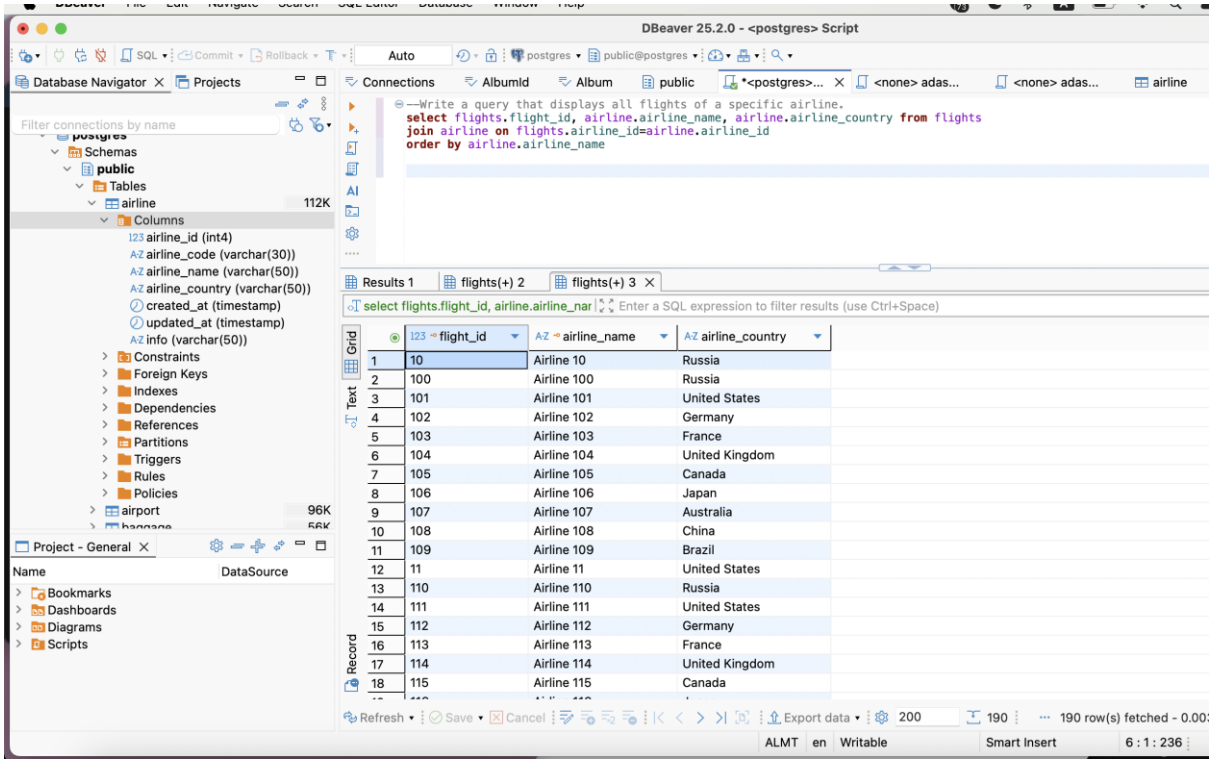
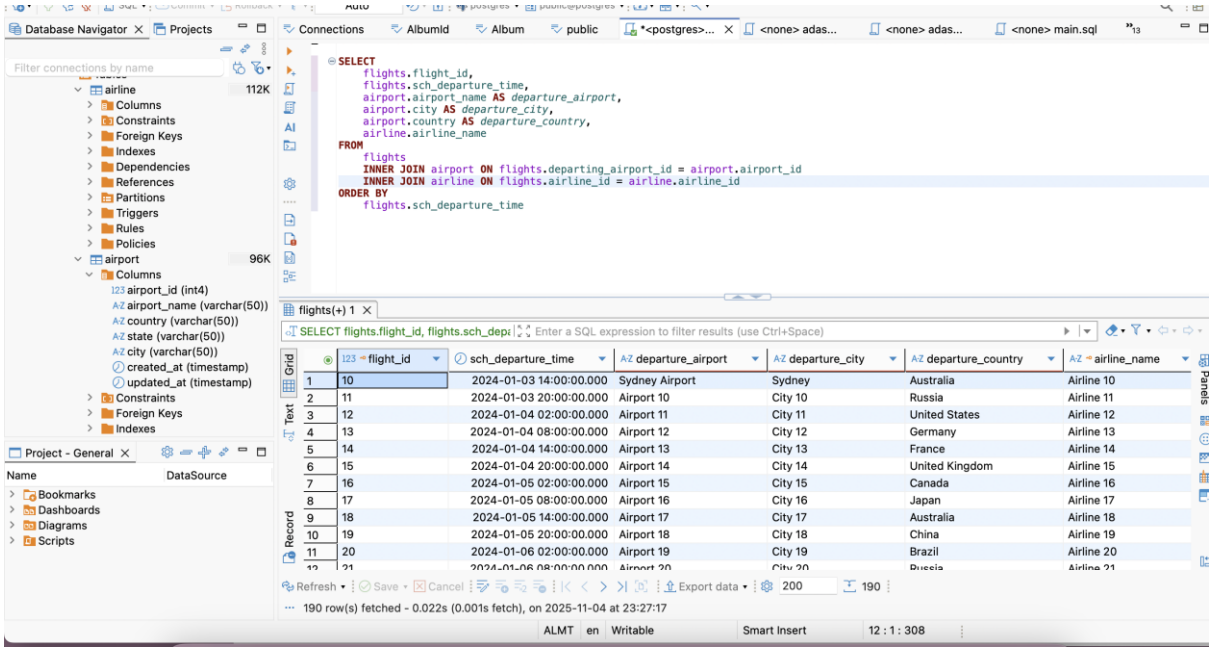
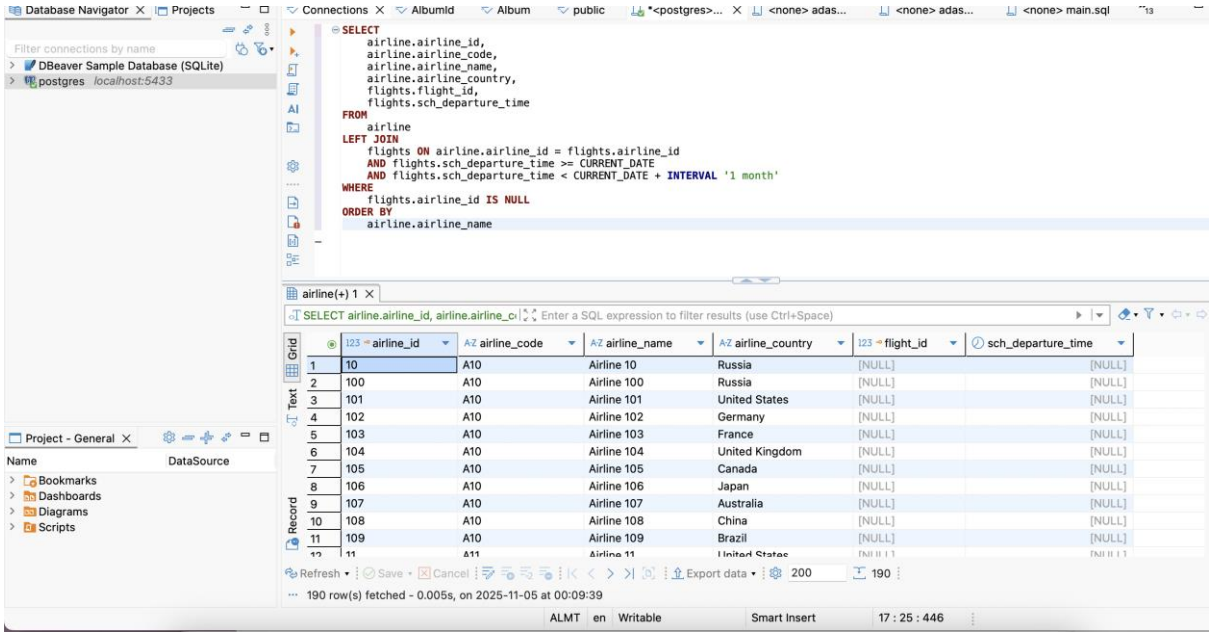
1. Write a query that displays all flights of a specific airline.



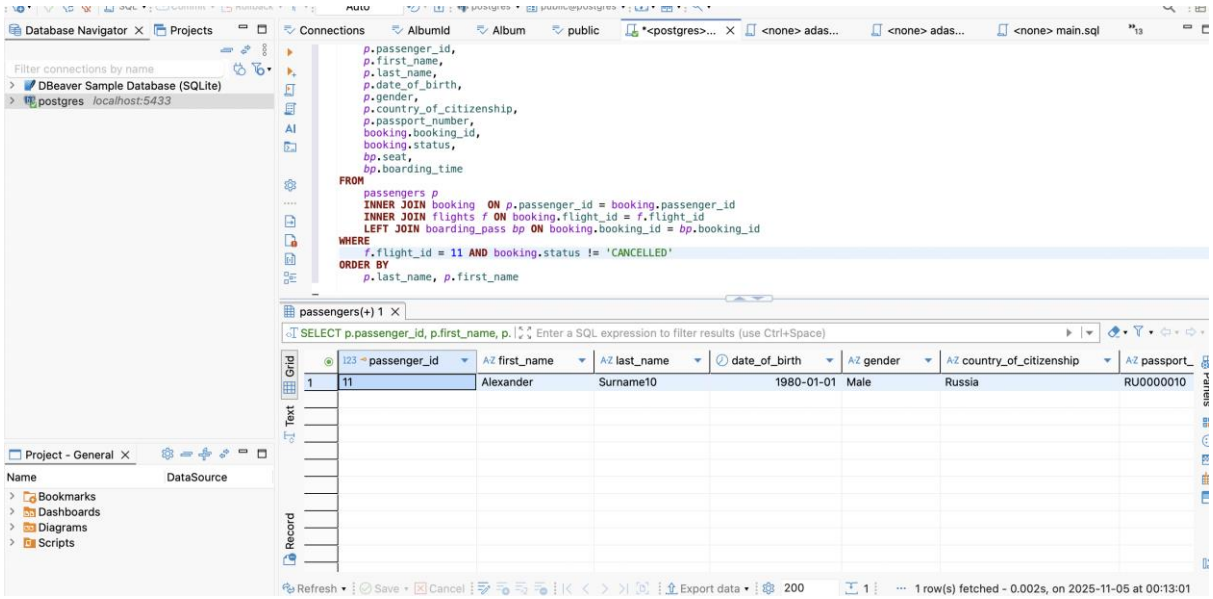
2. Compose a query to obtain a list of all flights with the names of departure airports.



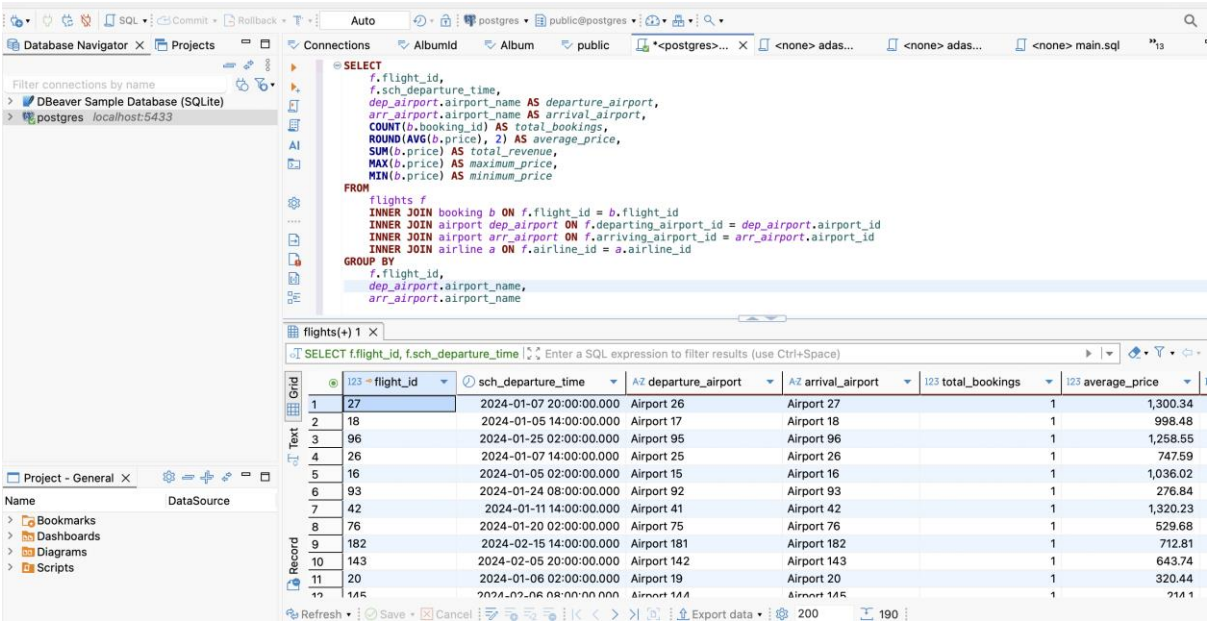
3. Create a query that finds all airlines that have no flights scheduled for the next month.



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



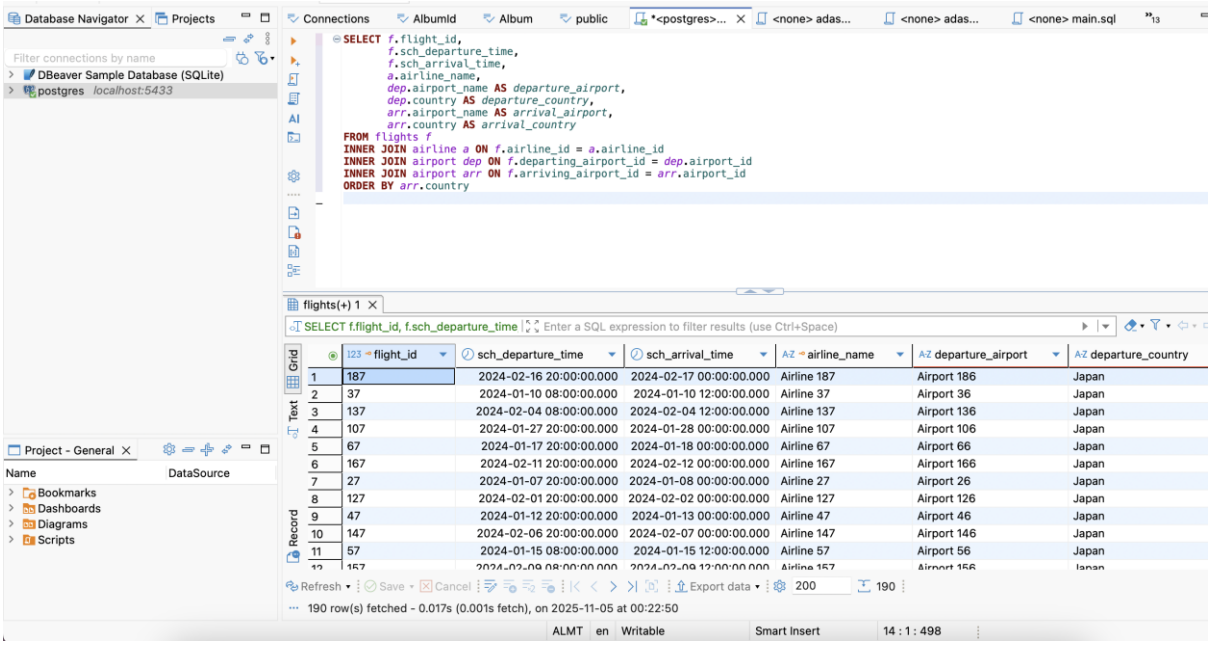
5. Write a query that calculates the average, total, maximum and minimum price of tickets for each flight.



```
SELECT
    f.flight_id,
    f.sch_departure_time,
    dep_airport.airport_name AS departure_airport,
    arr_airport.airport_name AS arrival_airport,
    COUNT(b.booking_id) AS total_bookings,
    ROUND(AVG(b.price), 2) AS average_price,
    SUM(b.price) AS total_revenue,
    MAX(b.price) AS maximum_price,
    MIN(b.price) AS minimum_price
FROM
    flights f
    INNER JOIN booking b ON f.flight_id = b.flight_id
    INNER JOIN airport dep_airport ON f.departing_airport_id = dep_airport.airport_id
    INNER JOIN airport arr_airport ON f.arriving_airport_id = arr_airport.airport_id
    INNER JOIN airline a ON f.airline_id = a.airline_id
GROUP BY
    f.flight_id,
    dep_airport.airport_name,
    arr_airport.airport_name
```

	flight_id	sch_departure_time	departure_airport	arrival_airport	total_bookings	average_price
1	27	2024-01-07 20:00:00.000	Airport 26	Airport 27	1	1,300.34
2	18	2024-01-05 14:00:00.000	Airport 17	Airport 18	1	998.48
3	96	2024-01-25 02:00:00.000	Airport 95	Airport 96	1	1,258.55
4	26	2024-01-07 14:00:00.000	Airport 25	Airport 26	1	747.59
5	16	2024-01-05 02:00:00.000	Airport 15	Airport 16	1	1,036.02
6	93	2024-01-24 08:00:00.000	Airport 92	Airport 93	1	276.84
7	42	2024-01-11 14:00:00.000	Airport 41	Airport 42	1	1,320.23
8	76	2024-01-20 02:00:00.000	Airport 75	Airport 76	1	529.68
9	182	2024-02-15 14:00:00.000	Airport 181	Airport 182	1	712.81
10	143	2024-02-05 20:00:00.000	Airport 142	Airport 143	1	643.74
11	20	2024-01-06 02:00:00.000	Airport 19	Airport 20	1	320.44

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.

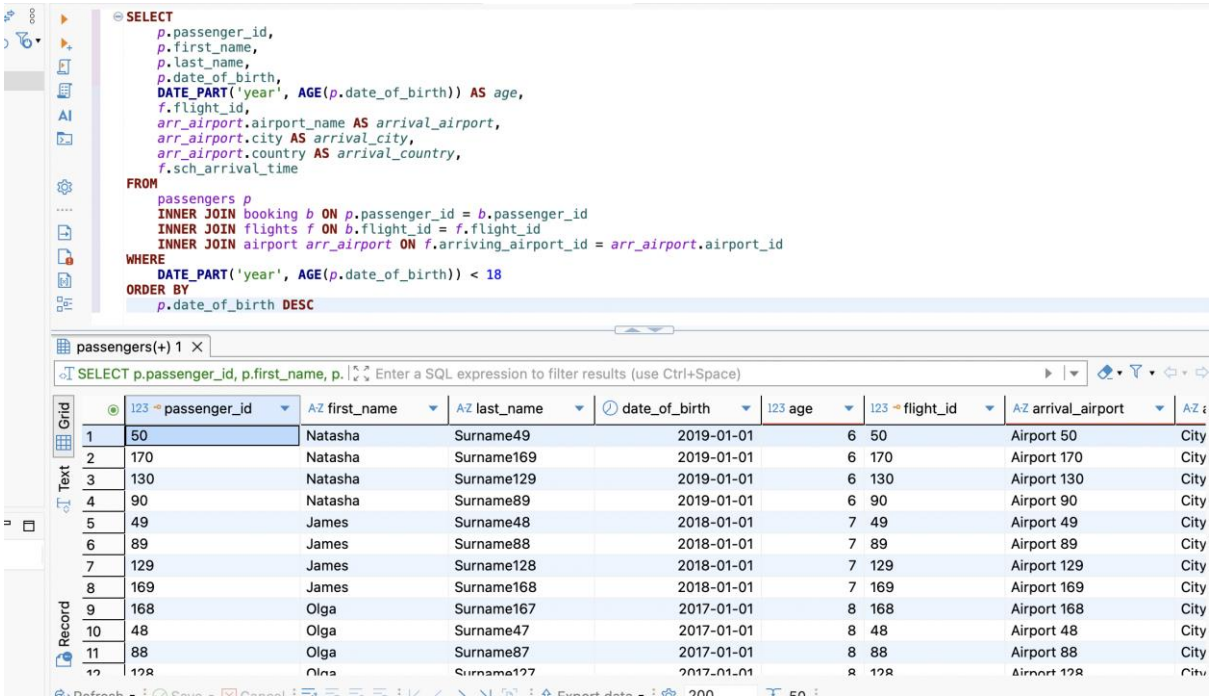


```
SELECT f.flight_id,
       f.sch_departure_time,
       f.sch_arrival_time,
       a.airline_name,
       dep.airport_name AS departure_airport,
       dep.country AS departure_country,
       arr.airport_name AS arrival_airport,
       arr.country AS arrival_country
FROM flights f
INNER JOIN airline a ON f.airline_id = a.airline_id
INNER JOIN airport dep ON f.departing_airport_id = dep.airport_id
INNER JOIN airport arr ON f.arriving_airport_id = arr.airport_id
ORDER BY arr.country
```

	flight_id	sch_departure_time	sch_arrival_time	airline_name	departure_airport	departure_country
1	187	2024-02-16 20:00:00.000	2024-02-17 00:00:00.000	Airline 187	Airport 186	Japan
2	37	2024-01-10 08:00:00.000	2024-01-10 12:00:00.000	Airline 37	Airport 36	Japan
3	137	2024-02-04 08:00:00.000	2024-02-04 12:00:00.000	Airline 137	Airport 136	Japan
4	107	2024-01-27 20:00:00.000	2024-01-28 00:00:00.000	Airline 107	Airport 106	Japan
5	67	2024-01-17 20:00:00.000	2024-01-18 00:00:00.000	Airline 67	Airport 66	Japan
6	167	2024-02-11 20:00:00.000	2024-02-12 00:00:00.000	Airline 167	Airport 166	Japan
7	27	2024-01-07 20:00:00.000	2024-01-08 00:00:00.000	Airline 27	Airport 26	Japan
8	127	2024-02-01 20:00:00.000	2024-02-02 00:00:00.000	Airline 127	Airport 126	Japan
9	47	2024-01-12 20:00:00.000	2024-01-13 00:00:00.000	Airline 47	Airport 46	Japan
10	147	2024-02-06 20:00:00.000	2024-02-07 00:00:00.000	Airline 147	Airport 146	Japan
11	57	2024-01-15 08:00:00.000	2024-01-15 12:00:00.000	Airline 57	Airport 56	Japan

190 row(s) fetched - 0.017s (0.001s fetch), on 2025-11-05 at 00:22:50

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

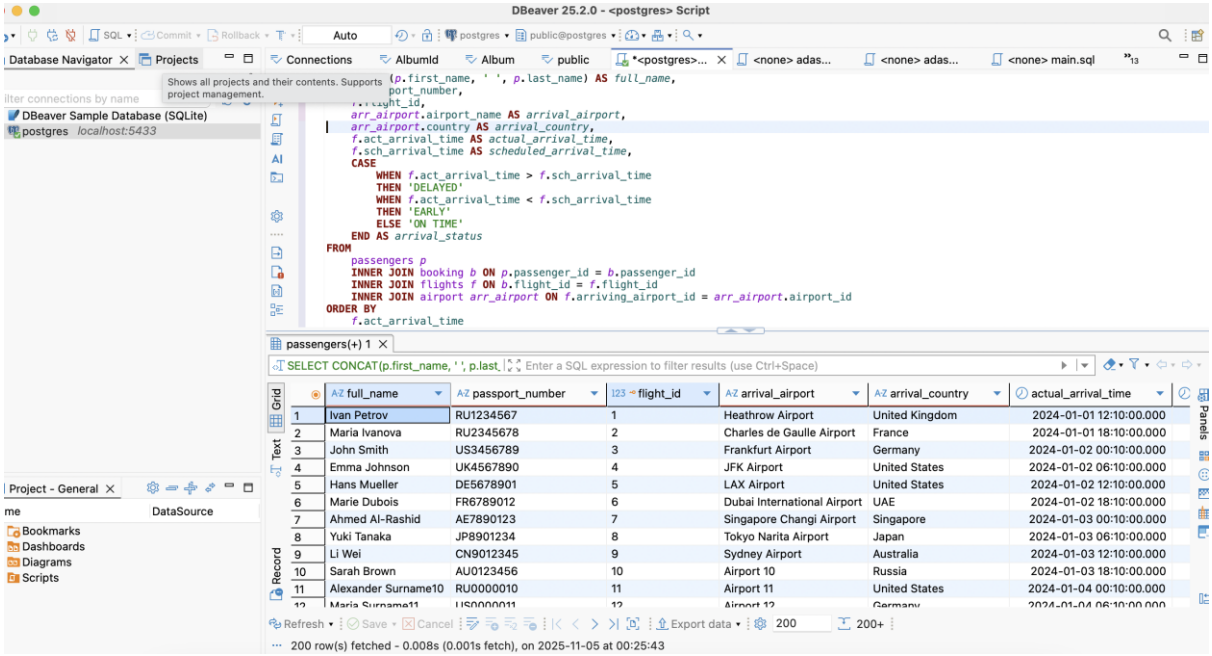


```sql
SELECT
    p.passenger_id,
    p.first_name,
    p.last_name,
    p.date_of_birth,
    DATE_PART('year', AGE(p.date_of_birth)) AS age,
    f.flight_id,
    arr_airport.airport_name AS arrival_airport,
    arr_airport.city AS arrival_city,
    arr_airport.country AS arrival_country,
    f.sch_arrival_time
FROM
    passengers p
    INNER JOIN booking b ON p.passenger_id = b.passenger_id
    INNER JOIN flights f ON b.flight_id = f.flight_id
    INNER JOIN airport arr_airport ON f.arriving_airport_id = arr_airport.airport_id
WHERE
    DATE_PART('year', AGE(p.date_of_birth)) < 18
ORDER BY
    p.date_of_birth DESC
```

passengers(+) 1

	passenger_id	first_name	last_name	date_of_birth	age	flight_id	arrival_airport	
1	50	Natasha	Surname49	2019-01-01	6	50	Airport 50	City
2	170	Natasha	Surname169	2019-01-01	6	170	Airport 170	City
3	130	Natasha	Surname129	2019-01-01	6	130	Airport 130	City
4	90	Natasha	Surname89	2019-01-01	6	90	Airport 90	City
5	49	James	Surname48	2018-01-01	7	49	Airport 49	City
6	89	James	Surname88	2018-01-01	7	89	Airport 89	City
7	129	James	Surname128	2018-01-01	7	129	Airport 129	City
8	169	James	Surname168	2018-01-01	7	169	Airport 169	City
9	168	Olga	Surname167	2017-01-01	8	168	Airport 168	City
10	48	Olga	Surname47	2017-01-01	8	48	Airport 48	City
11	88	Olga	Surname87	2017-01-01	8	88	Airport 88	City
12	128	Olga	Surname127	2017-01-01	8	128	Airport 128	City

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



```sql
SELECT CONCAT(p.first_name, ' ', p.last_name) AS full_name,
    p.passport_number,
    f.flight_id,
    arr_airport.airport_name AS arrival_airport,
    arr_airport.country AS arrival_country,
    f.act_arrival_time AS actual_arrival_time,
    f.sch_arrival_time AS scheduled_arrival_time,
    CASE
        WHEN f.act_arrival_time > f.sch_arrival_time
        THEN 'DELAYED'
        WHEN f.act_arrival_time < f.sch_arrival_time
        THEN 'EARLY'
        ELSE 'ON TIME'
    END AS arrival_status
FROM
    passengers p
    INNER JOIN booking b ON p.passenger_id = b.passenger_id
    INNER JOIN flights f ON b.flight_id = f.flight_id
    INNER JOIN airport arr_airport ON f.arriving_airport_id = arr_airport.airport_id
ORDER BY
    f.act_arrival_time
```

	full_name	passport_number	flight_id	arrival_airport	arrival_country	actual_arrival_time
1	Ivan Petrov	RU1234567	1	Heathrow Airport	United Kingdom	2024-01-01 12:10:00.000
2	Maria Ivanova	RU2345678	2	Charles de Gaulle Airport	France	2024-01-01 18:10:00.000
3	John Smith	US3456789	3	Frankfurt Airport	Germany	2024-01-02 00:10:00.000
4	Emma Johnson	UK4567890	4	JFK Airport	United States	2024-01-02 06:10:00.000
5	Hans Mueller	DE5678901	5	LAX Airport	United States	2024-01-02 12:10:00.000
6	Marie Dubois	FR6789012	6	Dubai International Airport	UAE	2024-01-02 18:10:00.000
7	Ahmed Al-Rashid	AE7890123	7	Singapore Changi Airport	Singapore	2024-01-03 00:10:00.000
8	Yuki Tanaka	JP8901234	8	Tokyo Narita Airport	Japan	2024-01-03 06:10:00.000
9	Li Wei	CN9012345	9	Sydney Airport	Australia	2024-01-03 12:10:00.000
10	Sarah Brown	AU0123456	10	Airport 10	Russia	2024-01-03 18:10:00.000
11	Alexander Surname10	RU0000010	11	Airport 11	United States	2024-01-04 00:10:00.000
12	Maria Surname11	US0000011	12	Airport 12	Germany	2024-01-04 06:10:00.000

200 row(s) fetched - 0.008s (0.001s fetch), on 2025-11-05 at 00:25:43

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