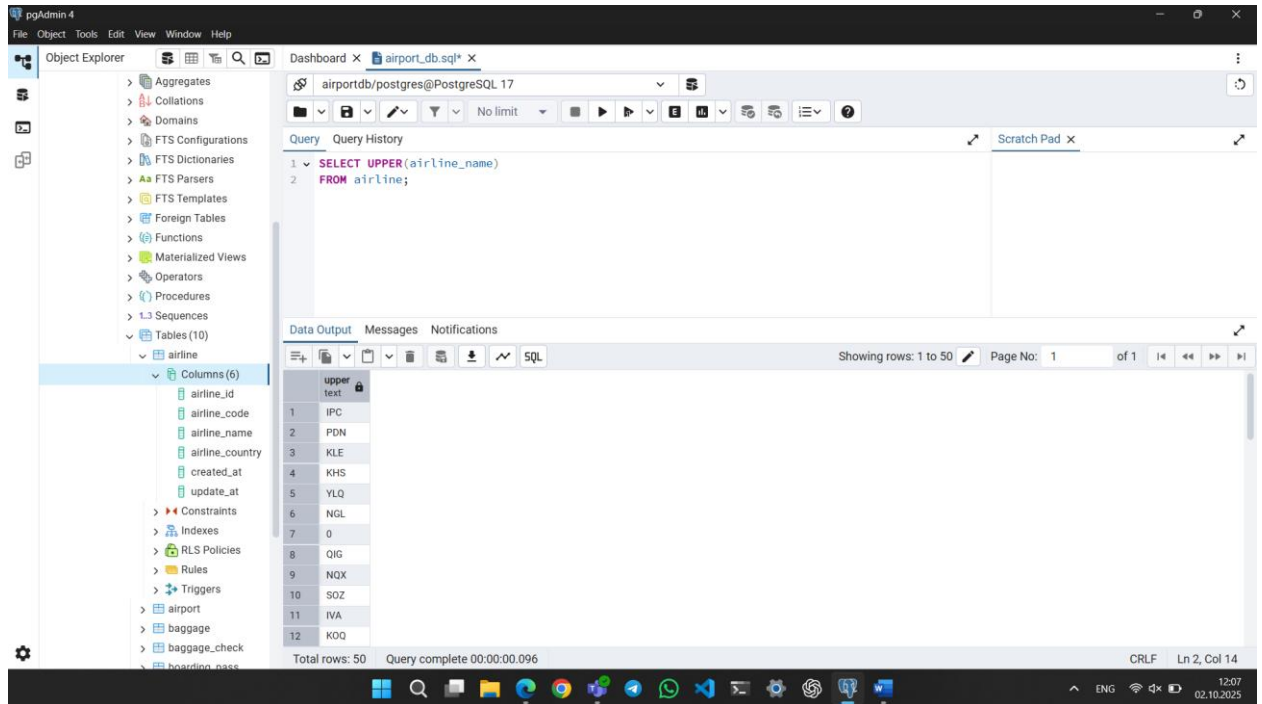
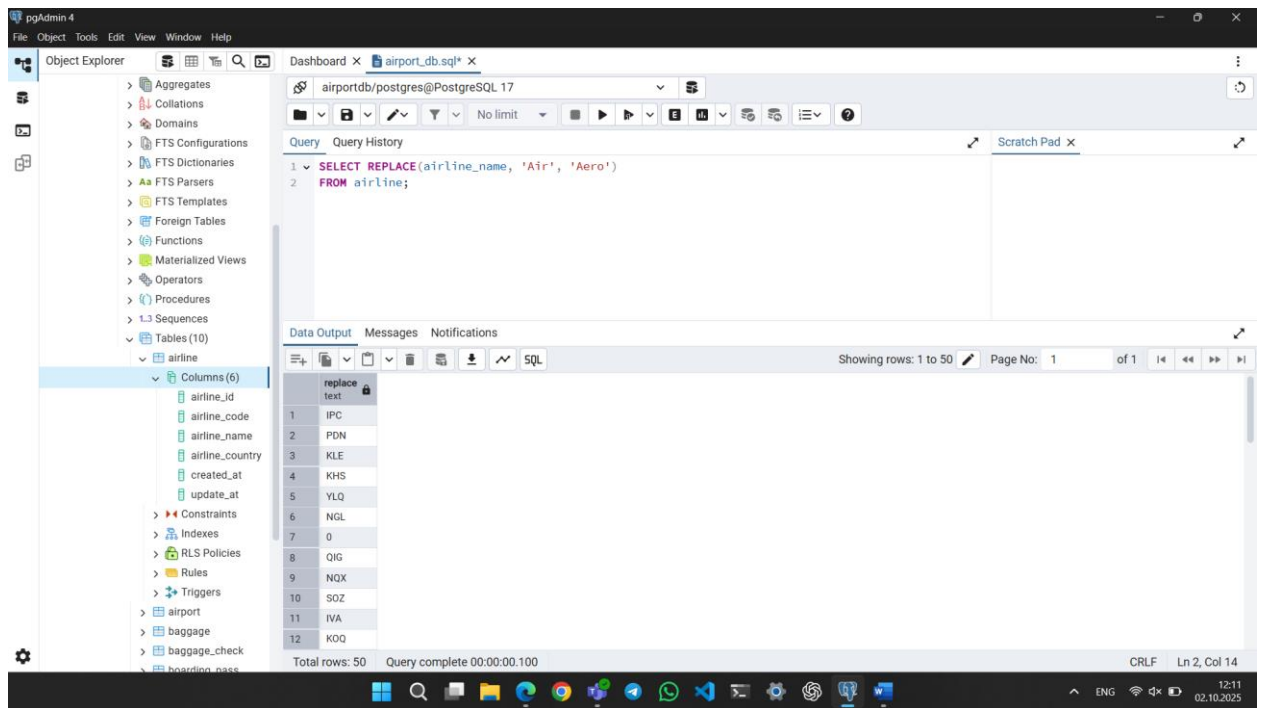


# Laboratory work №4

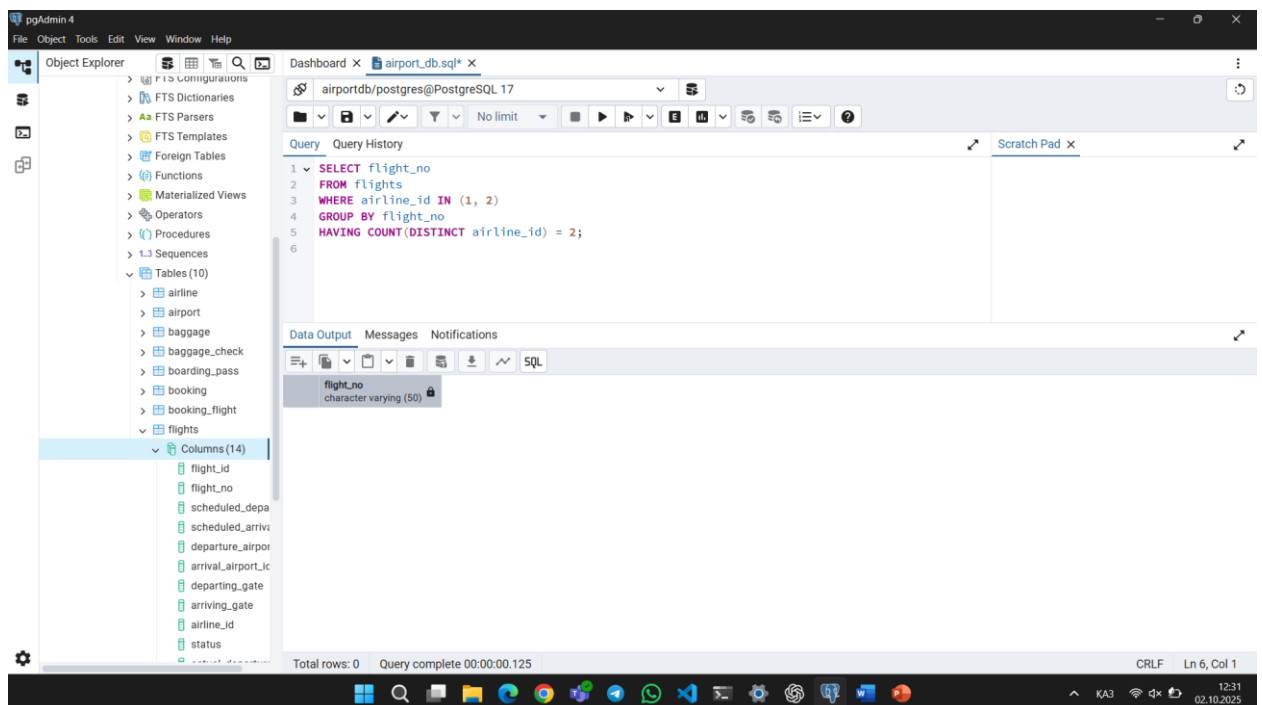
1.Retrieve all airline names in uppercase.



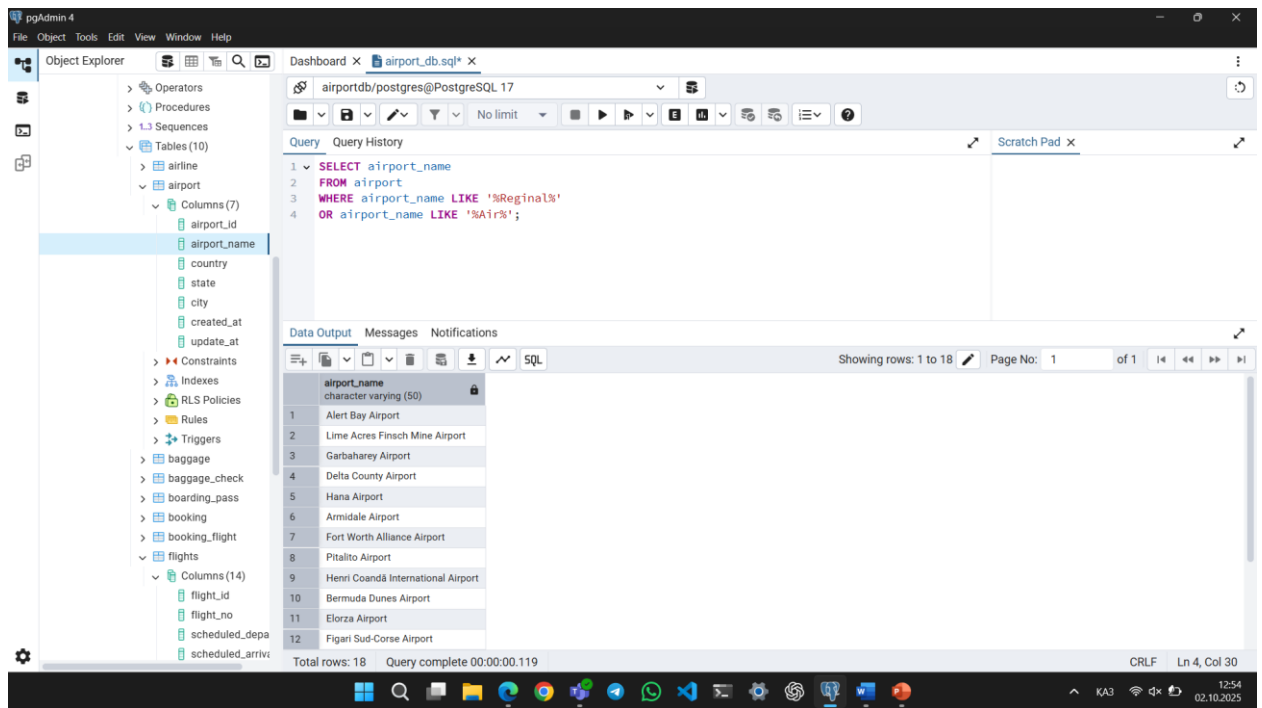
2. Replace any occurrence of the word “Air” in airline names with “Aero”.



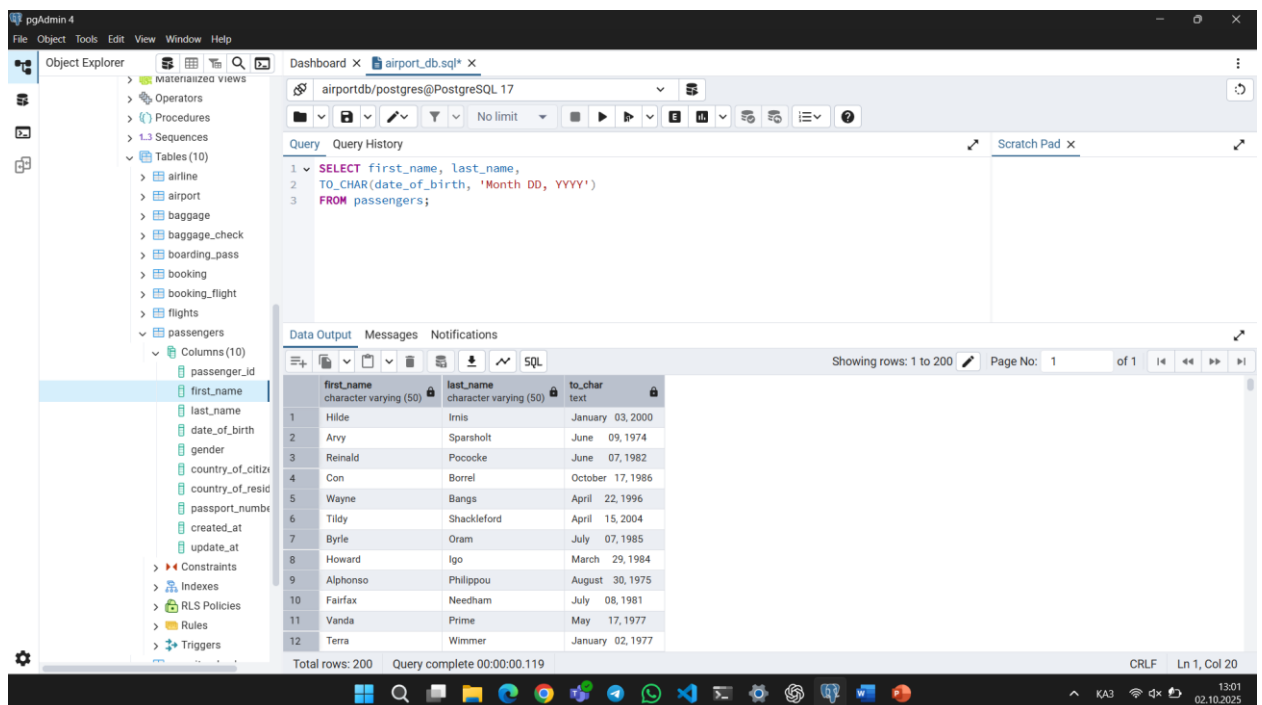
3. Find all flight numbers that coordinates with both airline 1 and airline 2.



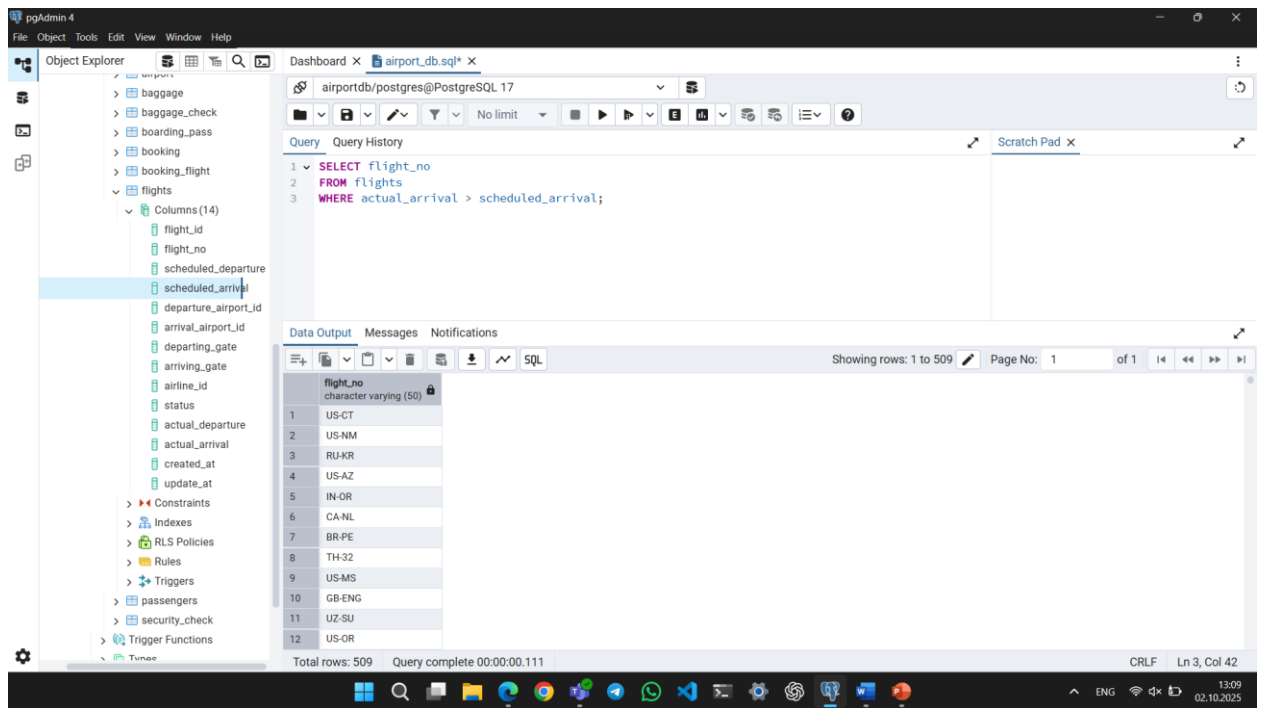
4. Retrieve airports that contain the word “Reginal” and “Air” in their names.



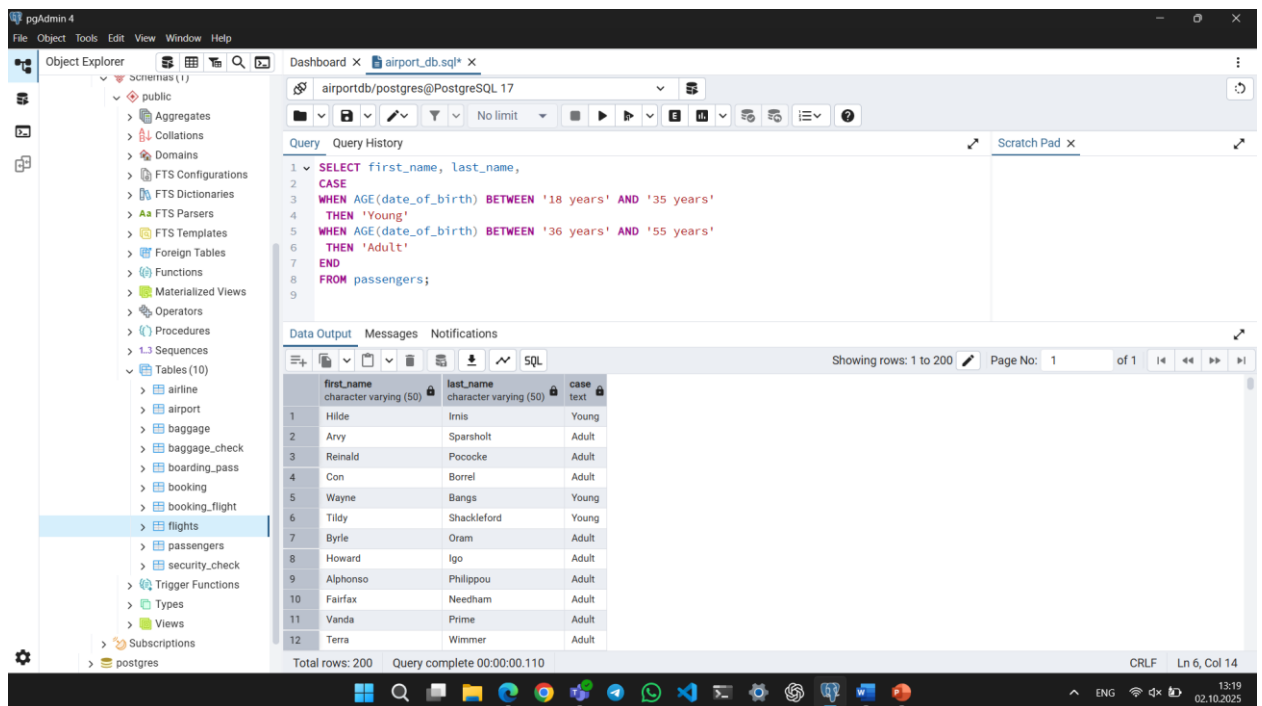
5. Retrieve passenger names and format their birth dates as 'Month DD, YYYY'.



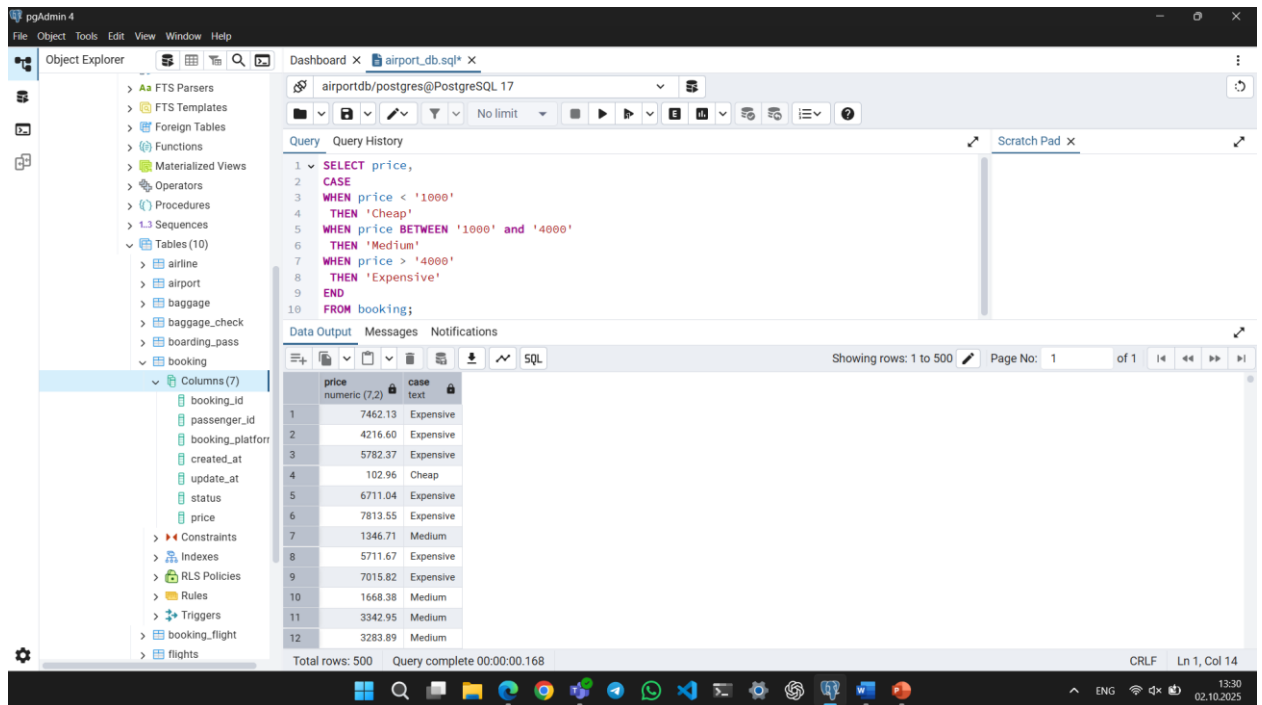
6. Find flight numbers that have been delayed based on the actual arrival time.



7. Create a query that divides passengers into age groups like 'Young' and 'Adult' based on their birth date. Young passengers age between 18 and 35, adult passengers age between 36 and 55.



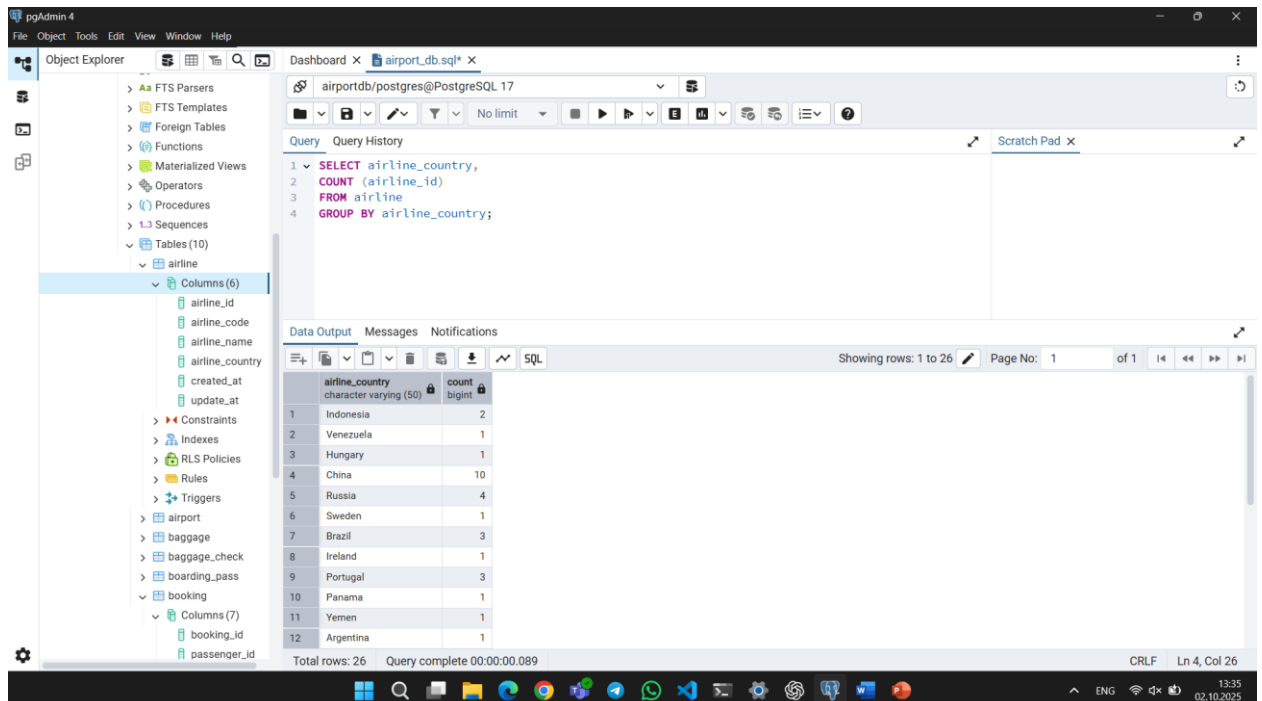
8. Create a query that categorizes ticket prices based on their price as “Cheap”, “Medium”, “Expensive”.



```
1 SELECT price,
2 CASE
3 WHEN price < '1000'
4 THEN 'Cheap'
5 WHEN price BETWEEN '1000' and '4000'
6 THEN 'Medium'
7 WHEN price > '4000'
8 THEN 'Expensive'
9 END
10 FROM booking;
```

price	case
7462.13	Expensive
4216.60	Expensive
5782.37	Expensive
102.96	Cheap
6711.04	Expensive
7813.55	Expensive
1346.71	Medium
5711.67	Expensive
7015.82	Expensive
1668.38	Medium
3342.95	Medium
3283.89	Medium

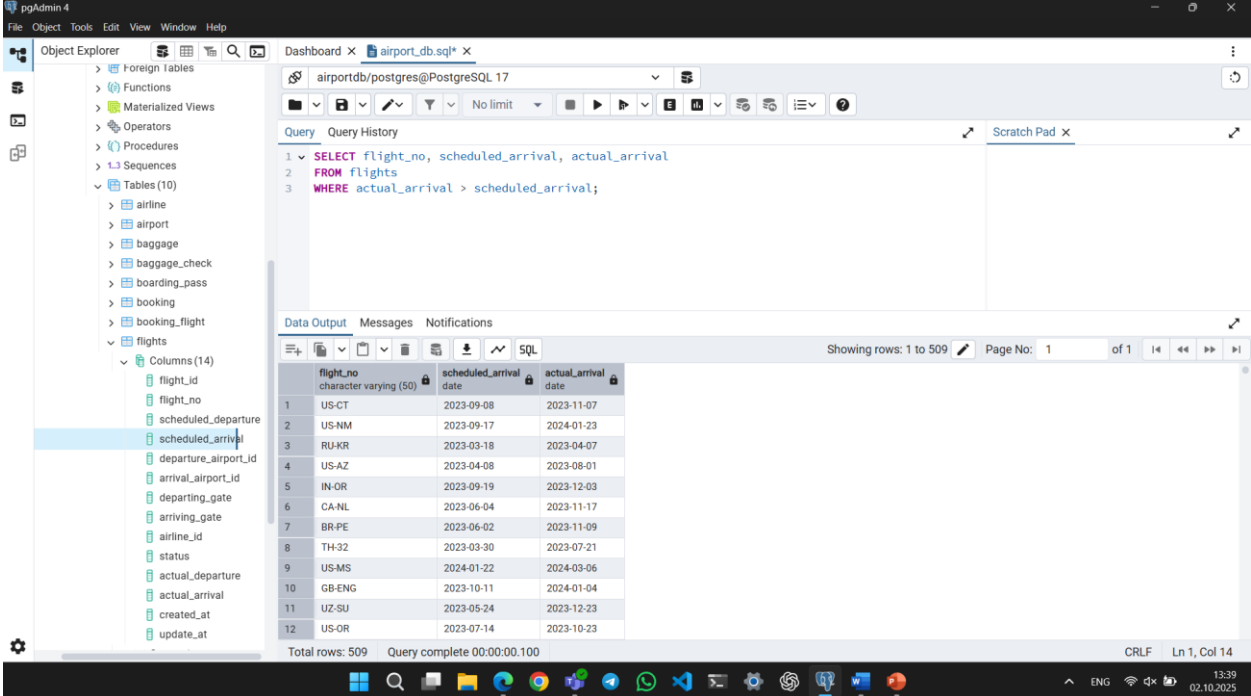
9. Find number of airline names in each airline country.



```
1 SELECT airline_country,
2 COUNT (airline_id)
3 FROM airline
4 GROUP BY airline_country;
```

airline_country	count
Indonesia	2
Venezuela	1
Hungary	1
China	10
Russia	4
Sweden	1
Brazil	3
Ireland	1
Portugal	3
Panama	1
Yemen	1
Argentina	1

10. Find flights that arrived late according to their actual arrival time compared to the scheduled time.



The screenshot shows the pgAdmin 4 interface. The left pane displays the Object Explorer with the 'flights' table selected under the 'airports' database. The central pane shows a SQL query:

```
1 SELECT flight_no, scheduled_arrival, actual_arrival
2 FROM flights
3 WHERE actual_arrival > scheduled_arrival;
```

The right pane, titled 'Data Output', displays the results of the query. It shows a table with three columns: 'flight\_no', 'scheduled\_arrival', and 'actual\_arrival'. The table contains 12 rows of data, representing flights that arrived late.

flight_no	scheduled_arrival	actual_arrival
US-CT	2023-09-08	2023-11-07
US-NM	2023-09-17	2024-01-23
RU-KR	2023-03-18	2023-04-07
US-AZ	2023-04-08	2023-08-01
IN-OR	2023-09-19	2023-12-03
CA-NL	2023-06-04	2023-11-17
BR-PE	2023-06-02	2023-11-09
TH-32	2023-03-30	2023-07-21
US-MS	2024-01-22	2024-03-06
GB-ENG	2023-10-11	2024-01-04
UZ-SU	2023-05-24	2023-12-23
US-OR	2023-07-14	2023-10-23

The bottom status bar indicates 'Total rows: 509' and 'Query complete 00:00:00.100'.