Control work

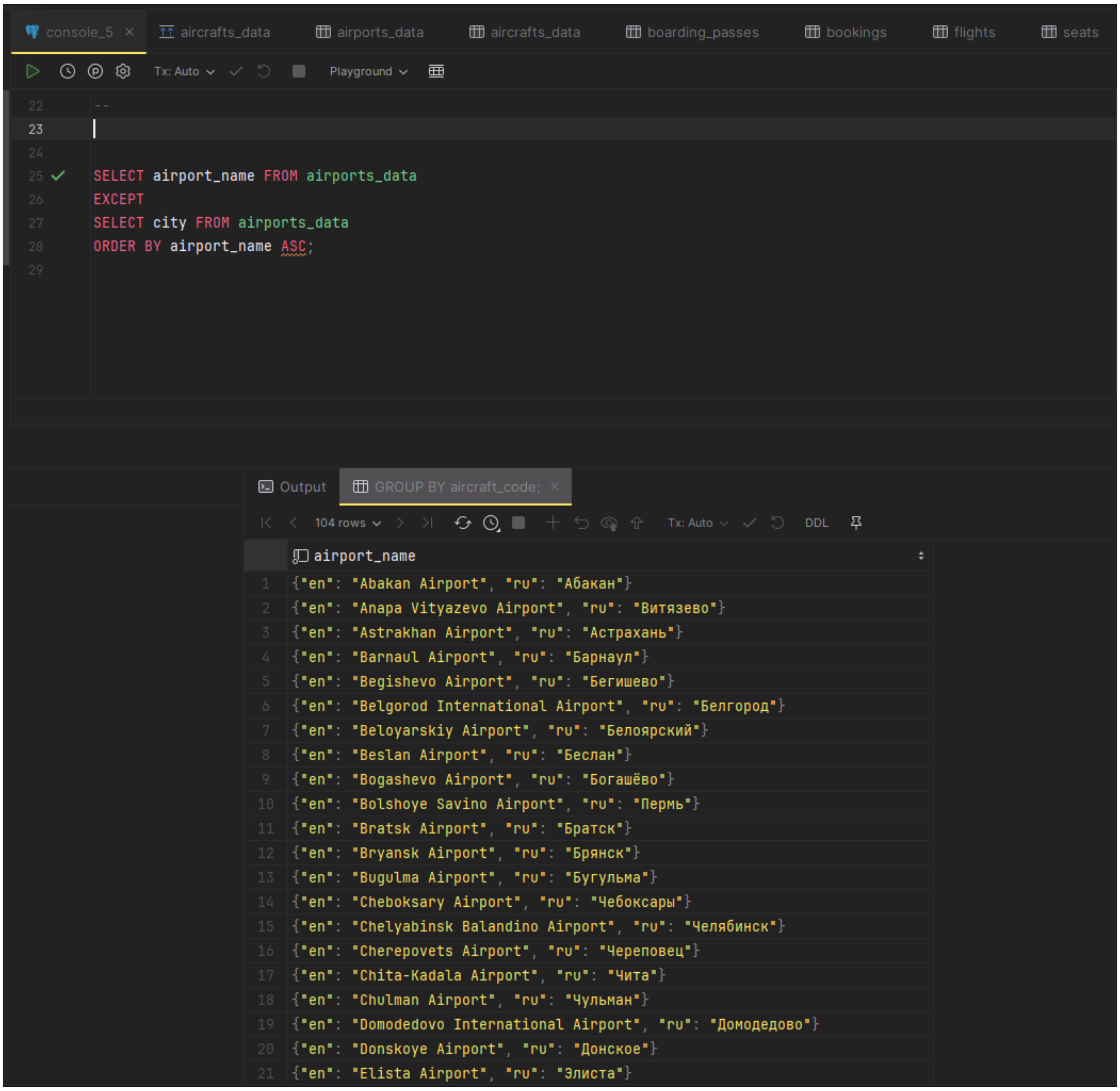
1.

SELECT airport_name FROM airports_data

EXCEPT

SELECT city FROM airports_data

ORDER BY airport_name ASC;

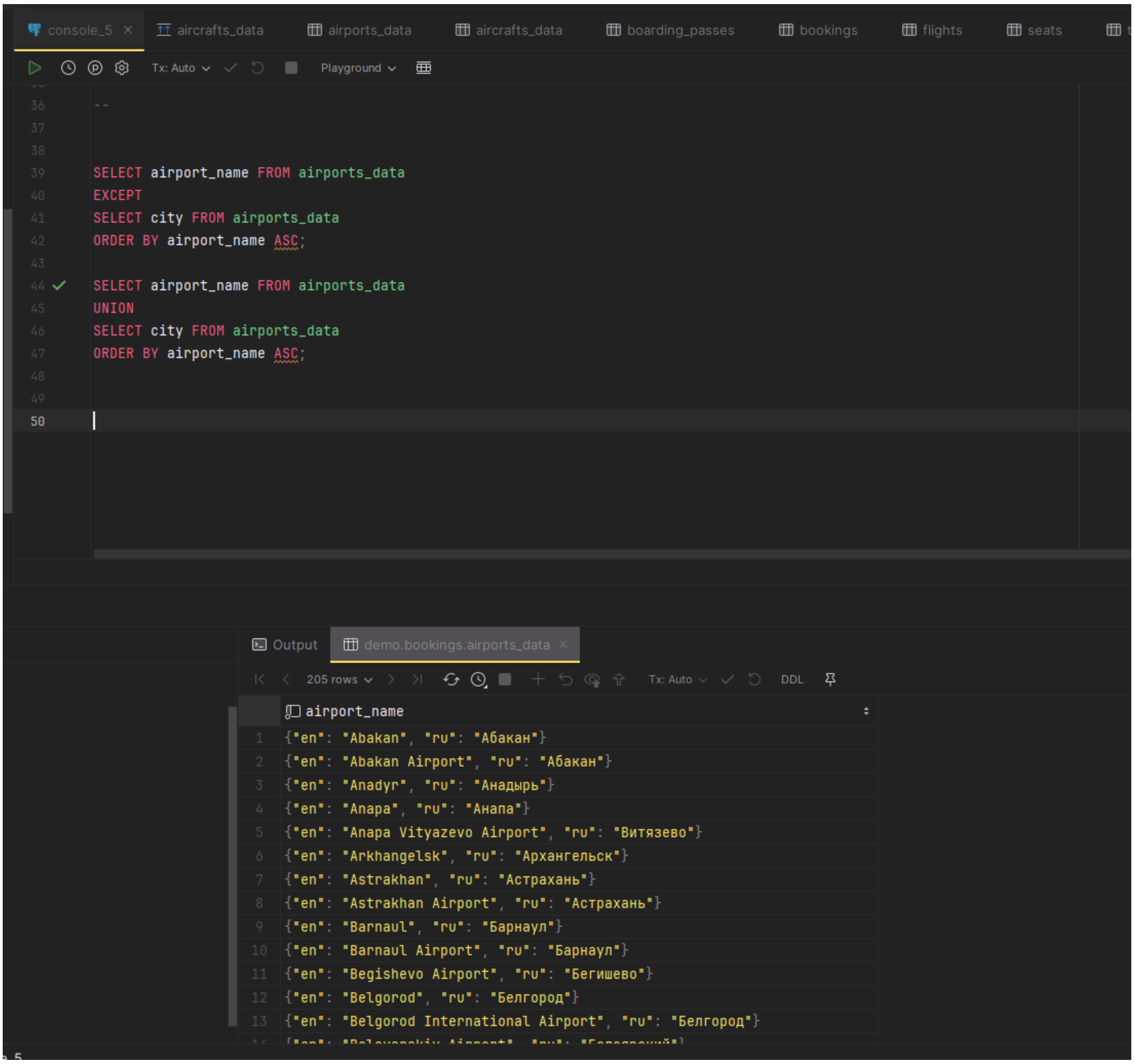


```sql
--

SELECT airport_name FROM airports_data
EXCEPT
SELECT city FROM airports_data
ORDER BY airport_name ASC;
```

	airport_name
1	{"en": "Abakan Airport", "ru": "Абакан"}
2	{"en": "Anapa Vityazevo Airport", "ru": "Витязево"}
3	{"en": "Astrakhan Airport", "ru": "Астрахань"}
4	{"en": "Barnaul Airport", "ru": "Барнаул"}
5	{"en": "Begishevo Airport", "ru": "Бегишево"}
6	{"en": "Belgorod International Airport", "ru": "Белгород"}
7	{"en": "Beloyarskiy Airport", "ru": "Белоярский"}
8	{"en": "Beslan Airport", "ru": "Беслан"}
9	{"en": "Bogashevo Airport", "ru": "Богашёво"}
10	{"en": "Bolshoye Savino Airport", "ru": "Пермь"}
11	{"en": "Bratsk Airport", "ru": "Братск"}
12	{"en": "Bryansk Airport", "ru": "Брянск"}
13	{"en": "Bugulma Airport", "ru": "Бугульма"}
14	{"en": "Cheboksary Airport", "ru": "Чебоксары"}
15	{"en": "Chelyabinsk Balandino Airport", "ru": "Челябинск"}
16	{"en": "Cherepovets Airport", "ru": "Череповец"}
17	{"en": "Chita-Kadala Airport", "ru": "Чита"}
18	{"en": "Chulman Airport", "ru": "Чульман"}
19	{"en": "Domodedovo International Airport", "ru": "Домодедово"}
20	{"en": "Donskoye Airport", "ru": "Донское"}
21	{"en": "Elista Airport", "ru": "Элиста"}

2.

```
SELECT airport_name FROM airports_data
UNION
SELECT city FROM airports_data
ORDER BY airport_name ASC;
```

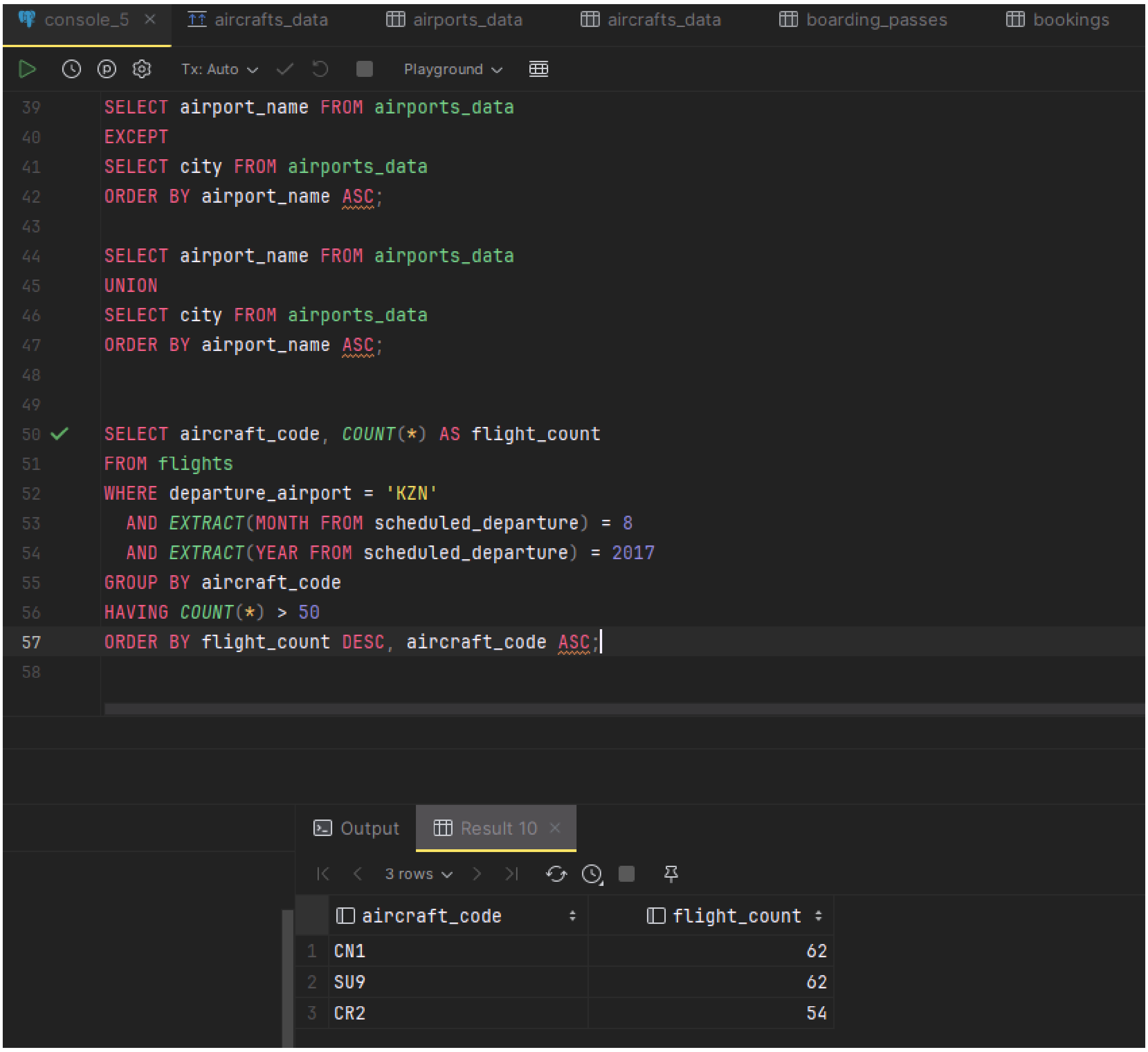


```
--


SELECT airport_name FROM airports_data
EXCEPT
SELECT city FROM airports_data
ORDER BY airport_name ASC;

SELECT airport_name FROM airports_data
UNION
SELECT city FROM airports_data
ORDER BY airport_name ASC;
```

	airport_name
1	{"en": "Abakan", "ru": "Абакан"}
2	{"en": "Abakan Airport", "ru": "Абакан"}
3	{"en": "Anadyr", "ru": "Анадырь"}
4	{"en": "Anapa", "ru": "Анапа"}
5	{"en": "Anapa Vityazevo Airport", "ru": "Витязево"}
6	{"en": "Arkhangelsk", "ru": "Архангельск"}
7	{"en": "Astrakhan", "ru": "Астрахань"}
8	{"en": "Astrakhan Airport", "ru": "Астрахань"}
9	{"en": "Barnaul", "ru": "Барнаул"}
10	{"en": "Barnaul Airport", "ru": "Барнаул"}
11	{"en": "Begishevo Airport", "ru": "Бегишево"}
12	{"en": "Belgorod", "ru": "Белгород"}
13	{"en": "Belgorod International Airport", "ru": "Белгород"}
14	{"en": "Beloyarskiy Airport", "ru": "Белоярский"}

3.

```
SELECT aircraft_code, COUNT(*) AS flight_count
FROM flights
WHERE departure_airport = 'KZN'
  AND EXTRACT(MONTH FROM scheduled_departure) = 8
  AND EXTRACT(YEAR FROM scheduled_departure) = 2017
GROUP BY aircraft_code
HAVING COUNT(*) > 50
ORDER BY flight_count DESC, aircraft_code ASC;
```

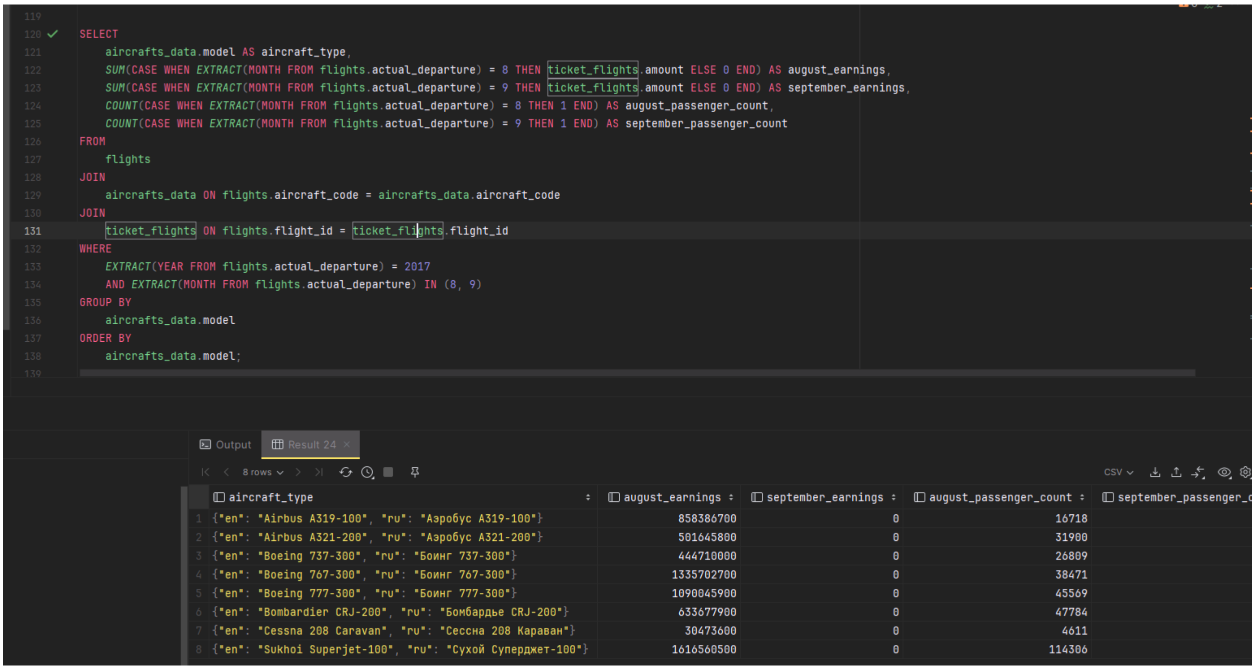


```
SELECT airport_name FROM airports_data
EXCEPT
SELECT city FROM airports_data
ORDER BY airport_name ASC;

SELECT airport_name FROM airports_data
UNION
SELECT city FROM airports_data
ORDER BY airport_name ASC;


SELECT aircraft_code, COUNT(*) AS flight_count
FROM flights
WHERE departure_airport = 'KZN'
  AND EXTRACT(MONTH FROM scheduled_departure) = 8
  AND EXTRACT(YEAR FROM scheduled_departure) = 2017
GROUP BY aircraft_code
HAVING COUNT(*) > 50
ORDER BY flight_count DESC, aircraft_code ASC;
```

	aircraft_code	flight_count
1	CN1	62
2	SU9	62
3	CR2	54

4. -
5. -
6. -
7. -
8. -

```
SELECT
    aircrafts_data.model AS aircraft_type,
    SUM(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 8 THEN ticket_flights.amount ELSE 0 END) AS august_earnings,
    SUM(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 9 THEN ticket_flights.amount ELSE 0 END) AS september_earnings,
    COUNT(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 8 THEN 1 END) AS august_passenger_count,
    COUNT(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 9 THEN 1 END) AS september_passenger_count
FROM
    flights
JOIN
    aircrafts_data ON flights.aircraft_code = aircrafts_data.aircraft_code
JOIN
    ticket_flights ON flights.flight_id = ticket_flights.flight_id
WHERE
    EXTRACT(YEAR FROM flights.actual_departure) = 2017
    AND EXTRACT(MONTH FROM flights.actual_departure) IN (8, 9)
GROUP BY
    aircrafts_data.model
ORDER BY
    aircrafts_data.model;
;
```



```sql
SELECT
    aircrafts_data.model AS aircraft_type,
    SUM(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 8 THEN ticket_flights.amount ELSE 0 END) AS august_earnings,
    SUM(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 9 THEN ticket_flights.amount ELSE 0 END) AS september_earnings,
    COUNT(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 8 THEN 1 END) AS august_passenger_count,
    COUNT(CASE WHEN EXTRACT(MONTH FROM flights.actual_departure) = 9 THEN 1 END) AS september_passenger_count
FROM
    flights
JOIN
    aircrafts_data ON flights.aircraft_code = aircrafts_data.aircraft_code
JOIN
    ticket_flights ON flights.flight_id = ticket_flights.flight_id
WHERE
    EXTRACT(YEAR FROM flights.actual_departure) = 2017
    AND EXTRACT(MONTH FROM flights.actual_departure) IN (8, 9)
GROUP BY
    aircrafts_data.model
ORDER BY
    aircrafts_data.model;
```

	aircraft_type	august_earnings	september_earnings	august_passenger_count	september_passenger_c
1	{"en": "Airbus A319-100", "ru": "Аэробус A319-100"}	858386700	0	16718	
2	{"en": "Airbus A321-200", "ru": "Аэробус A321-200"}	501645800	0	31900	
3	{"en": "Boeing 737-300", "ru": "Боинг 737-300"}	444710000	0	26809	
4	{"en": "Boeing 767-300", "ru": "Боинг 767-300"}	1335702700	0	38471	
5	{"en": "Boeing 777-300", "ru": "Боинг 777-300"}	1090045900	0	45569	
6	{"en": "Bombardier CRJ-200", "ru": "Бомбардье CRJ-200"}	633677900	0	47784	
7	{"en": "Cessna 208 Caravan", "ru": "Сессна 208 Караван"}	30473600	0	4611	
8	{"en": "Sukhoi Superjet-100", "ru": "Сухой Суперджет-100"}	1616560500	0	114306	