Задача 1

```sql
SELECT airport_name->>'ru' AS airport_name
FROM airports_data
EXCEPT
SELECT city->>'ru'
FROM airports_data
ORDER BY airport_name;
```

	airport_name
1	Байкал
2	Баратаевка
3	Бегишево
4	Беслан
5	Бесовец
6	Богашёво
7	Витязево
8	Внуково
9	Гумрак
10	Домодедово
11	Донское
12	Елизово

29	Толмачёво
30	Туношна
31	Уйташ
32	Ульяновск-Восточный
33	Хабаровск-Новый
34	Хомутово
35	Храброво
36	Хурба
37	Чульман
38	Шереметьево

Задача 2

```sql
SELECT airport_name->>'ru' AS airport_name
FROM airports_data
INTERSECT
SELECT city->>'ru'
FROM airports_data
ORDER BY airport_name;
```

	airport_name
1	Абакан
2	Анадырь
3	Астрахань
4	Барнаул
5	Белгород
6	Белоярский
7	Братск
8	Брянск
9	Бугульма
10	Владивосток
11	Воркута
12	Воронеж
13	Геленджик
14	Горно-Алтайск

55	Усинск
56	Усть-Илимск
57	Усть-Кут
58	Уфа
59	Ухта
60	Ханты-Мансийск
61	Чебоксары
62	Челябинск
63	Череповец
64	Чита
65	Элиста
66	Якутск

Задача 3

```sql
SELECT a.model->>'ru' as name, COUNT(f.flight_no) AS cnt
FROM flights f INNER JOIN aircrafts_data a ON f.aircraft_code =
a.aircraft_code
WHERE f.departure_airport = 'KZN' AND f.scheduled_departure::text LIKE '2017-
08-%'
GROUP BY a.model
HAVING COUNT(f.flight_no) > 50
ORDER BY cnt DESC, name;
```

name	cnt
1 Сессна 208 Караван	62
2 Сухой Суперджет-100	62
3 Бомбардье CRJ-200	54

Задача 4

```sql
SELECT * FROM aircrafts_data
INNER JOIN airports_data ON airports_data.airport_code !=
aircrafts_data.aircraft_code
INNER JOIN boarding_passes ON boarding_passes.ticket_no !=
aircrafts_data.aircraft_code
INNER JOIN bookings ON bookings.book_ref != aircrafts_data.aircraft_code
INNER JOIN flights ON flights.flight_no != aircrafts_data.aircraft_code
INNER JOIN seats ON seats.aircraft_code = aircrafts_data.aircraft_code
INNER JOIN ticket_flights ON ticket_flights.ticket_no !=
aircrafts_data.aircraft_code
INNER JOIN tickets ON tickets.ticket_no != aircrafts_data.aircraft_code;
```
`[2023-12-08 10:45:30] [53100] ОШИБКА: не удалось записать в файл "base/pgsql_tmp/pgsql_tmp24820.31": No space left on device`

Задача 5

```sql
SELECT f.flight_no FROM ticket_flights t RIGHT JOIN flights f ON t.flight_id
= f.flight_id WHERE t.ticket_no IS NULL
GROUP BY f.flight_no
```

	flight_no			
1	PG0001		610	PG0696
2	PG0002		611	PG0697
3	PG0003		612	PG0698
4	PG0004		613	PG0700
5	PG0005		614	PG0701
6	PG0006		615	PG0702
7	PG0007		616	PG0703
8	PG0008		617	PG0705
9	PG0009		618	PG0706
10	PG0010		619	PG0707

Задача 6

```sql
SELECT f.flight_no, SUM(amount) as revenue FROM ticket_flights t INNER JOIN
flights f ON t.flight_id = f.flight_id
WHERE f.scheduled_departure::text LIKE '2017-08-%'
GROUP BY f.flight_no
ORDER BY revenue DESC;
```

	flight_no	revenue			
1	PG0208	490338600			
2	PG0209	480332200			
3	PG0222	356857100			
4	PG0223	348201000	461	PG0077	418000
5	PG0357	331505300	462	PG0038	408900
6	PG0356	307950500	463	PG0030	349800
7	PG0277	294280000	464	PG0352	334400
8	PG0278	293283200	465	PG0535	264000
9	PG0199	272320100	466	PG0354	206800
10	PG0198	264368400	467	PG0079	198000
11	PG0225	183613400	468	PG0097	168000
12	PG0226	178342500	469	PG0098	123200
13	PG0013	167781900	470	PG0343	118800
14	PG0224	167485600	471	PG0685	72400
			472	PG0590	6400

Задание 8

```sql
SELECT passenger_name FROM tickets WHERE passenger_name ILIKE 'iRiNa%'
GROUP BY passenger_name;
```

	passenger_name
1	IRINA NOVIKOVA
2	IRINA ZHUKOVA
3	IRINA SMIRNOVA
4	IRINA MIKHAYLOVA
5	IRINA ISAEVA
6	IRINA FILIPPOVA
7	IRINA LAZAREVA
8	IRINA KUZMINA
9	IRINA TIKHONOVA
10	IRINA MOROZOVA
11	IRINA ILINA
12	IRINA MATVEEVA
13	IRINA ERMAKOVA

103	IRINA POLYAKOVA
104	IRINA KRASNOVA
105	IRINA KISELEVA
106	IRINA KARPOVA
107	IRINA GORBUNOVA
108	IRINA BORISOVA
109	IRINA NAUMOVA
110	IRINA LOGINOVA
111	IRINA GAVRILOVA
112	IRINA DAVYDOVA
113	IRINA KOROLEVA