

1)

```

1 ✓ select airports_data.airport_code, airports_data.coordinates
2   from airports_data
3   where city ->> 'ru' = 'Казань' or city ->> 'ru' = 'Москва';

```

Output demo.bookings.airports\_data x

	airport_code	coordinates
1	SV0	(37.4146,55.972599)
2	VK0	(37.2615013123,55.5914993286)
3	DME	(37.90629959106445,55.40879821777344)
4	KZN	(49.278701782227,55.606201171875)

2)

```

1 ✓ select airports_data.airport_code || airports_data.airport_name || airports_data.city || airports_data.coordinates || airports_data.timezone as полная_информация
2   from airports_data
3   order by полная_информация;

```

Output полная\_информация: text x

	полная_информация
1	AAQ{"en": "Anapa Vityazevo Airport", "ru": "Витязево"}{"en": "Anapa", "ru": "Анапа"}(37.347301483154,45.002101898193)Europe/Moscow
2	ABA{"en": "Abakan Airport", "ru": "Абакан"}{"en": "Abakan", "ru": "Абакан"}(91.38500213623047,53.7400016784668)Asia/Krasnoyarsk
3	AER{"en": "Sochi International Airport", "ru": "Сочи"}{"en": "Sochi", "ru": "Сочи"}(39.956600189209,43.449901580811)Europe/Moscow
4	ARN{"en": "Talagi Airport", "ru": "Талари"}{"en": "Arkhangelsk", "ru": "Архангельск"}(40.71670150750836,64.60030364990234)Europe/Moscow
5	ASF{"en": "Astrakhan Airport", "ru": "Астрахань"}{"en": "Astrakhan", "ru": "Астрахань"}(48.0063018799,46.2832984924)Europe/Samara
6	BAX{"en": "Barnaul Airport", "ru": "Барнаул"}{"en": "Barnaul", "ru": "Барнаул"}(83.53849792480469,53.363800048828125)Asia/Krasnoyarsk
7	BQS{"en": "Ignatyev Airport", "ru": "Игнатьево"}{"en": "Blagoveshensk", "ru": "Благовещенск"}(127.41200256347656,50.42539978027344)Asia/Yakutsk
8	BTX{"en": "Bratsk Airport", "ru": "Братск"}{"en": "Bratsk", "ru": "Братск"}(101.697998046075,56.370601654052734)Asia/Irkutsk
9	BZK{"en": "Bryansk Airport", "ru": "Брянск"}{"en": "Bryansk", "ru": "Брянск"}(34.176399231,53.214199066199996)Europe/Moscow

3)

```

1 ✓ select airports_data.airport_name ->> 'ru', count(*) from flights
2   join airports_data on flights.departure_airport = airports_data.airport_code
3   where departure_airport in('KZN', 'DME', 'OVV', 'IKT', 'LED', 'SV0')
4   group by airport_name
5   order by count(*) desc;

```

Output Result 34 x

	?column?	count
1	Домодедово	3217
2	Шереметьево	2981
3	Пулково	1900
4	Толмачёво	1055
5	Казань	471
6	Иркутск	366

4)

✓

```
select airports_data.airport_name ->> 'ru', count(*) from flights
      join airports_data on flights.departure_airport = airports_data.airport_code
where departure_airport not in('KZN', 'DME', 'OVB', 'IKT', 'LED', 'SVO')
group by airport_name
order by count(*);
```

Output Result 35 ×

98 rows

	?column?	count
1	Хурба	18
2	Усинск	18
3	Елизово	26
4	Полярный	27
5	Нягань	27
6	Иваново-Южный	34
7	Анадырь	36
8	Магадан	36
9	Липецк	43

5)

✓

```
select flights.flight_no, flights.scheduled_departure, count(ticket_flights.ticket_no) from ticket_flights
join flights on flights.flight_id = ticket_flights.flight_id
group by flights.flight_no, flights.scheduled_departure
having count(ticket_no) between 27 and 90
order by flight_no desc , scheduled_departure desc , count(ticket_no) desc;
```

Output Result 36 ×

1-500 of 501+

	flight_no	scheduled_departure	count
1	P60710	2017-09-12 01:25:00.000000 +00:00	38
2	P60710	2017-09-05 01:25:00.000000 +00:00	57
3	P60710	2017-08-29 01:25:00.000000 +00:00	78
4	P60710	2017-08-22 01:25:00.000000 +00:00	82
5	P60710	2017-08-15 01:25:00.000000 +00:00	89
6	P60710	2017-08-08 01:25:00.000000 +00:00	86
7	P60710	2017-08-01 01:25:00.000000 +00:00	51
8	P60710	2017-07-25 01:25:00.000000 +00:00	52
9	P60709	2017-09-04 17:20:00.000000 +00:00	44

6)

```
select tickets.passenger_name from tickets
union all
select airports_data.airport_name ->> 'ru' from airports_data
order by passenger_name desc ;
```

Output demo.bookings.tickets x

1-500 of 501+

	passenger_name
1	Якутск
2	Элиста
3	Шереметьево
4	Чульман
5	Чита
6	Череповец
7	Челябинск
8	Чебоксары
9	Хурба

7)

```
select tickets.passenger_name, 'Пассажир' as type from tickets
union all
select airports_data.airport_name ->> 'ru', 'Аэропорт' from airports_data
order by type desc, passenger_name desc ;
```

Output Result 38 x

1-500 of 501+

	passenger_name	type
1	ZULFIYA ZOTOVA	Пассажир
2	ZULFIYA ZOTOVA	Пассажир
3	ZULFIYA ZHURAVLEVA	Пассажир
4	ZULFIYA ZAYCEVA	Пассажир
5	ZULFIYA ZAYCEVA	Пассажир
6	ZULFIYA ZAKHAROVA	Пассажир
7	ZULFIYA ZAKHAROVA	Пассажир
8	ZULFIYA VOROBEOVA	Пассажир
9	ZULFIYA VOLKOVA	Пассажир

8)

The screenshot shows a SQL query execution interface. The query is as follows:

```
SELECT COUNT(*)  
FROM flights  
LEFT JOIN ticket_flights ON flights.flight_id = ticket_flights.flight_id  
WHERE ticket_flights.flight_id is null;
```

The result is displayed in a table with one row and one column:

count
10895

The interface also shows a console with the following messages:

```
se  
no@localhost  
console 433 ms  
console 433 ms
```

9)

10)

```
-- Найдите самый дешевый и самый дорогой билет в разрезе  
-- каждого рейса, но не каждого полета.
```

```
select flight_no, max(ticket_flights.amount), min(ticket_flights.amount) from flights  
join ticket_flights on flights.flight_id = ticket_flights.flight_id  
group by flight_no;
```

Output Result 3 x

483 rows

	flight_no	max	min
1	P60012	13500	12300
2	P60013	42100	14000
3	P60014	9800	3300
4	P60015	20600	18700
5	P60016	20600	18700
6	P60019	10500	9500
7	P60020	10500	9500
8	P60029	5300	5300
9	P60030	5300	5300
10	P60032	5300	5300
11	P60035	8700	8700
12	P60038	8700	8700
13	P60039	9700	3200
14	P60040	9700	3200