

a.

```
21 ✓ select airport_code, coordinates from airports_data
22 where city ->> 'ru' = 'Казань' or city ->> 'ru' = 'Москва'
23 order by airport_code desc;
```

Output demo.bookings.airports_data x

4 rows

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

b.

```
25 ✓ select airport_code || airport_name || city || coordinates || timezone as полная_информация
26 from airports_data
27 order by полная_информация
```

Output полная_информация:text x

104 rows

CSV

	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	ARH{"en": "Talagi Airport", "ru": "Талаги"}{"en": "Arkhangelsk", "ru": "Архангельск"}(40.71670150756836,64.60030364990234)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": "Blagoveschensk", "ru": "Благовещенск"}(127.41200256347656,50.42539978027344)Asia/...
8	BTK{"en": "Bratsk Airport", "ru": "Братск"}{"en": "Bratsk", "ru": "Братск"}(101.697998046875,56.370601654052734)Asia/Irkutsk
9	BZK{"en": "Bryansk Airport", "ru": "Брянск"}{"en": "Bryansk", "ru": "Брянск"}(34.176399231,53.214199066199996)Europe/Moscow
10	CEE{"en": "Cherepovets Airport", "ru": "Череповец"}{"en": "Cherepovets", "ru": "Череповец"}(38.015800676100004,59.273601532)Europe/Moscow

c.

```
28
29 ✓ select departure_airport, count(*) as количество_рейсов from flights
30 where departure_airport in ('KZN', 'DME', 'OVB', 'IKT', 'LED', 'SVO')
31 group by departure_airport
32 ORDER BY количество_рейсов desc;
```

Output Result 8 ×

6 rows

	departure_airport	количество_рейсов
1	DME	3217
2	SVO	2981
3	LED	1900
4	OVB	1055
5	KZN	471
6	IKT	366

d.

```
28
29 ✓ select departure_airport, count(*) as количество_рейсов from flights
30 where departure_airport not in ('KZN', 'DME', 'OVB', 'IKT', 'LED', 'SVO')
31 group by departure_airport
32 ORDER BY количество_рейсов;
```

Output Result 9 ×

98 rows

	departure_airport	количество_рейсов
1	USK	18
2	KXK	18
3	PKC	26
4	PYJ	27
5	NYA	27
6	IWA	34
7	DYR	36
8	GDX	36
9	KYZ	43
10	LPK	43
11	NFG	44
12	FVK	53

e.

```
34 ✓ select flight_no, scheduled_departure, count(ticket_no) as passangers
35 from flights
36     full join bookings.ticket_flights tf on flights.flight_id = tf.flight_id
37 group by flight_no, scheduled_departure
38 having count(ticket_no) between 27 and 90
39 order by flight_no desc, scheduled_departure desc, passangers desc;
```

Output Result 7 ×

1-500 of 501+ | Refresh | Filter

	flight_no	scheduled_departure	passangers
1	PG0710	2017-09-12 01:25:00.000000 +00:00	38
2	PG0710	2017-09-05 01:25:00.000000 +00:00	57
3	PG0710	2017-08-29 01:25:00.000000 +00:00	78
4	PG0710	2017-08-22 01:25:00.000000 +00:00	82
5	PG0710	2017-08-15 01:25:00.000000 +00:00	89
6	PG0710	2017-08-08 01:25:00.000000 +00:00	86
7	PG0710	2017-08-01 01:25:00.000000 +00:00	51
8	PG0710	2017-07-25 01:25:00.000000 +00:00	52
9	PG0709	2017-09-04 17:20:00.000000 +00:00	44
10	PG0709	2017-08-28 17:20:00.000000 +00:00	63
11	PG0709	2017-08-21 17:20:00.000000 +00:00	61
12	PG0709	2017-08-14 17:20:00.000000 +00:00	58

f.

```
41 ✓ select passenger_name from tickets
42 union all
43 select airport_name -> 'ru' from airports_data
44 order by passenger_name desc;
```

Output demo.bookings.tickets ×

1-500 of 501+ | Refresh | Filter | Tx: Auto

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

g.

```
41 ✓ select passenger_name, 'пассажир' as type from tickets
42 union all
43 select airport_name ->> 'ru', 'аэропорт' as type from airports_data
44 order by type desc, passenger_name desc;|
```

Output Result 10 ×

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	ZULEIYA VOROBEVA	пассажир

h.

```
46 ✓ select count(*)
47 from flights f left join bookings.ticket_flights tf on f.flight_id = tf.flight_id
48 where tf.ticket_no is null
```

tf

Output count(*):bigint ×

1 row | | | |

count
10895

i. skipped

j.

```
50 ✓ select f.flight_no, min(amount) as min, max(amount) as max
51 from flights f join bookings.ticket_flights tf on f.flight_id = tf.flight_id
52 group by f.flight_no;
53
```

Output Result 19 ×

483 rows

	flight_no	min	max
1	PG0012	12300	13500
2	PG0013	14000	42100
3	PG0014	3300	9800
4	PG0015	18700	20600
5	PG0016	18700	20600
6	PG0019	9500	10500
7	PG0020	9500	10500