

```
-- 1
select airports_data.airport_name ->> 'ru' as name from airports_data
EXCEPT
SELECT airports_data.city ->> 'ru' from airports_data
order by name;
```

	name
1	Байкал
2	Баратаевка
3	Бегишево
4	Беслан
5	Бесовец
6	Богашёво
7	Витязево
8	Внуково
9	Гумрак
10	Домодедово

```
-- 2
select airports_data.airport_name ->> 'ru' as name from airports_data
INTERSECT
SELECT airports_data.city ->> 'ru' from airports_data
order by name;
```

	name
1	Абакан
2	Анадырь
3	Астрахань
4	Барнаул
5	Белгород
6	Белоярский
7	Братск
8	Брянск
9	Бугульма

```
-- 3
select flights.aircraft_code, count(*) from flights
join aircrafts_data on flights.aircraft_code = aircrafts_data.aircraft_code
where departure_airport = 'KZN' and (select extract(YEAR from
scheduled_departure)) = 2017 and (select extract(Month from
scheduled_departure)) = 8
group by flights.aircraft_code
having count(*) > 50
order by count(*) desc, flights.aircraft_code;
```

	aircraft_code	count
1	CN1	62
2	SU9	62
3	CR2	54

-- 4

```
select * from bookings
join tickets on bookings.book_ref = tickets.book_ref
join ticket_flights on tickets.ticket_no = ticket_flights.ticket_no
join boarding_passes on ticket_flights.ticket_no = boarding_passes.ticket_no
and ticket_flights.flight_id = boarding_passes.flight_id
join flights on ticket_flights.flight_id = flights.flight_id
join airports_data on flights.departure_airport = airports_data.airport_code
join aircrafts_data on flights.aircraft_code = aircrafts_data.aircraft_code
join seats on aircrafts_data.aircraft_code = seats.aircraft_code
```

	bookings.book_ref	book_date	total_amount	tickets.ticket_no	tickets.book_ref	passenger_id	passenger_name	contact_data
1	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
2	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
3	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
4	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
5	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
6	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
7	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
8	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
9	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
10	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}
11	DEF678	2017-07-01 01:46:00.000000 +00:00	73300.00	0005433547228	DEF678	9905 773345	ANASTASIYA MATVEEVA	{"email": "matveeva_anastasiya-"}

-- 5

```
select flights.flight_id
from ticket_flights
RIGHT JOIN flights on flights.flight_id = ticket_flights.flight_id
where ticket_flights.flight_id is null;
```

	flight_id
1	12267
2	28365
3	23772
4	8533
5	12377
6	21905
7	11257
8	16828
9	13729
10	5161

-- 6

```
select flight_no, sum(ticket_flights.amount) as sum from ticket_flights
join flights on ticket_flights.flight_id = flights.flight_id
group by flight_no, scheduled_departure
having (select extract(YEAR from scheduled_departure)) = 2017 and (select
extract(Month from scheduled_departure)) = 8
order by sum desc;
```

	flight_no	sum
1	P60208	17146600
2	P60209	17023600
3	P60208	16962100
4	P60208	16900600
5	P60208	16839100
6	P60208	16777600
7	P60208	16777600
8	P60208	16593100
9	P60209	16593100
10	P60208	16593100

```
-- 7
select flight_no,
       (select sum(amount) from ticket_flights where ((select extract(YEAR
from scheduled_departure)) = 2017 and (select extract(Month from
scheduled_departure)) = 8 and flights.flight_id = ticket_flights.flight_id))
as august,
       (select sum(amount) from ticket_flights where ((select extract(YEAR
from scheduled_departure)) = 2017 and (select extract(Month from
scheduled_departure)) = 9 and flights.flight_id = ticket_flights.flight_id))
as september from ticket_flights
join flights on ticket_flights.flight_id = flights.flight_id
group by flight_no, scheduled_departure
order by flight_no, september desc , august desc;
```

	flight_no	august	september
1	P60012	<null>	<null>
2	P60012	<null>	<null>
3	P60012	<null>	<null>
4	P60012	<null>	<null>
5	P60012	<null>	<null>
6	P60012	<null>	<null>
7	P60012	20766980900	<null>
8	P60012	20766980900	<null>
9	P60012	20766980900	<null>
10	P60012	20766980900	<null>

```
-- 8
select tickets.passenger_name from tickets
where passenger_name ilike '%iRiNa%'
group by tickets.passenger_name
```

113 rows	
	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 MOZGOVA