Задача 1

```
103
104      -- KP 2 --
105      💡
106      -- 1 --
107  ✔  SELECT (airport_name ->> 'ru')::text as Название_аэропорта FROM airports_data
108      EXCEPT (SELECT (city ->> 'ru')::text FROM airports_data);
109
110      -- 2 --
111      SELECT (airport_name ->> 'ru')::text as Название_аэропорта FROM airports_data
112      INTERSECT (SELECT (city ->> 'ru')::text FROM airports_data);
113
114      -- 3 --
115      SELECT aircraft_code, COUNT(flight_id) FROM flights
116      WHERE departure_airport = 'KZN' AND scheduled_departure::date >= '2017-08-01' AND scheduled_departure::d
```

Output   ⊞ 1 -- ×

38 rows

Название_аэропорта
1   Уйташ
2   Чульман
3   Талаги
4   Баратаевка
5   Иваново-Южный
6   Емельяново
7   Ульяновск-Восточный

Задача 2

```
-- 2 --
✔  SELECT (airport_name ->> 'ru')::text as Название_аэропорта FROM airports_data
   INTERSECT (SELECT (city ->> 'ru')::text FROM airports_data);

   -- 3 --
   SELECT aircraft_code, COUNT(flight_id) FROM flights
   WHERE departure_airport = 'KZN' AND scheduled_departure::date >= '2017-08-01' AND scheduled_depart
   GROUP BY aircraft_code
   HAVING COUNT(flight_id) > 50
   ORDER BY COUNT(flight_id) DESC, aircraft_code ASC;
```

Output   ⊞ 2 -- ×

66 rows

Название_аэропорта
1   Липецк
2   Уфа
3   Калуга
4   Новый Уренгой
5   Нарьян-Мар
6   Белгород
7   Салехард

Задача 3

```sql
-- 3 --
SELECT aircraft_code, COUNT(flight_id) FROM flights
WHERE departure_airport = 'KZN' AND scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31'
GROUP BY aircraft_code
HAVING COUNT(flight_id) > 50
ORDER BY COUNT(flight_id) DESC, aircraft_code ASC;

-- 4 --
SELECT * FROM flights
INNER JOIN ticket_flights tf on flights.flight_id = tf.flight_id
INNER JOIN aircrafts_data ad on ad.aircraft_code = flights.aircraft_code
INNER JOIN airports_data a on a.airport_code = flights.arrival_airport
INNER JOIN boarding_passes bp on flights.flight_id = bp.flight_id
INNER JOIN seats s on ad.aircraft_code = s.aircraft_code
INNER JOIN tickets t on tf.ticket_no = t.ticket_no
```

Output — 3 rows

aircraft_code	count
1 CN1	62
2 SU9	62
3 CR2	54

Задача 4. Тут результаты вывода по-моему смысла не имеют

```sql
-- 4 --
SELECT * FROM flights
INNER JOIN ticket_flights tf on flights.flight_id = tf.flight_id
INNER JOIN aircrafts_data ad on ad.aircraft_code = flights.aircraft_code
INNER JOIN airports_data a on a.airport_code = flights.arrival_airport
INNER JOIN boarding_passes bp on flights.flight_id = bp.flight_id
INNER JOIN seats s on ad.aircraft_code = s.aircraft_code
INNER JOIN tickets t on tf.ticket_no = t.ticket_no
INNER JOIN bookings b on t.book_ref = b.book_ref;
```

Задача 5

```sql
-- 5 --
SELECT COUNT(TF) FROM (SELECT COUNT(f.flight_id) FROM ticket_flights
    RIGHT JOIN flights f on f.flight_id = ticket_flights.flight_id
    GROUP BY f .flight_id
    HAVING COUNT(ticket_no) = 0) as TF;


    -- 6 --


SELECT flight_no, SUM(tf.amount) as Выручка FROM flights
    INNER JOIN ticket flights tf on flights.flight id = tf.flight id
```

Output ▦ 3 -- ✕   ▦ COUNT(TF):bigint ✕

|< < 1 row ∨ > >| ↻ ⏱ ■ 📌

	count ⟐
1	10895

Задача 6

```sql
-- 6 --

SELECT flight_no, SUM(tf.amount) as Выручка FROM flights
    INNER JOIN ticket_flights tf on flights.flight_id = tf.flight_id
    WHERE scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31'
    GROUP BY flight_no
ORDER BY Выручка DESC;

-- 7 --

SELECT
    flight_no,
    SUM(CASE WHEN scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31' THEN tf
    SUM(CASE WHEN scheduled_departure::date >= '2017-09-01' AND scheduled_departure::date <= '2017-09-30' THEN tf
FROM flights
INNER JOIN ticket_flights tf on flights.flight_id = tf.flight_id
GROUP BY flight_no
ORDER BY august DESC, september DESC, flight_no ASC;
```

Output ▦ 3 -- ✕   ▦ Result 56 ✕

|< < 472 rows ∨ > >| ↻ ⏱ ■ 📌

	flight_no ⟐	Выручка ⟐
1	PG0208	490338600
2	PG0209	480332200
3	PG0222	356857100
4	PG0223	348201000
5	PG0357	331505300
6	PG0356	307950500
7	PG0277	294280000

Задача 7

```sql
-- 7 --
SELECT
    flight_no,
    SUM(CASE WHEN scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31' THEN tf.amount ELSE 0 END) as august,
    SUM(CASE WHEN scheduled_departure::date >= '2017-09-01' AND scheduled_departure::date <= '2017-09-30' THEN tf.amount ELSE 0 END) as september
FROM flights
INNER JOIN ticket_flights tf on flights.flight_id = tf.flight_id
GROUP BY flight_no
ORDER BY august DESC, september DESC, flight_no ASC;

-- 8 --

SELECT DISTINCT passenger_name FROM tickets
WHERE passenger_name ILIKE '%iRiNa%';

-- 9 --

SELECT
    (ad_model ->> 'ru')::text
```

Output | 3 -- × | Result 57 ×

483 rows ∨

	flight_no	august	september
1	PG0208	490338600	51378300
2	PG0209	480332200	89546000
3	PG0222	356857100	38532200
4	PG0223	348201000	63801500
5	PG0357	331505300	83622200
6	PG0356	307950500	50770600
7	PG0277	294280000	39832800

Задача 8

```sql
-- 8 --

SELECT DISTINCT passenger_name FROM tickets
WHERE passenger_name ILIKE '%iRiNa%';


-- 9 --


SELECT
    (ad.model ->> 'ru')::text,
    COUNT(tf.ticket_no) FILTER (WHERE scheduled_departure::date >
    SUM(CASE WHEN scheduled_departure::date >= '2017-08-01' AND s
    COUNT(tf.ticket_no) FILTER (WHERE scheduled_departure::date >
```

Output   ▦ 3 -- ✕   ▦ 8 -- ✕

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

Задача 9

```sql
-- 9 --

SELECT
    (ad.model ->> 'ru')::text,
    COUNT(tf.ticket_no) FILTER (WHERE scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31') as augustCount,
    SUM(CASE WHEN scheduled_departure::date >= '2017-08-01' AND scheduled_departure::date <= '2017-08-31' THEN tf.amount ELSE 0 END) as august,
    COUNT(tf.ticket_no) FILTER (WHERE scheduled_departure::date >= '2017-09-01' AND scheduled_departure::date <= '2017-09-30') as septemberCount,
    SUM(CASE WHEN scheduled_departure::date >= '2017-09-01' AND scheduled_departure::date <= '2017-09-30' THEN tf.amount ELSE 0 END) as september
FROM flights as f
INNER JOIN ticket_flights tf on f.flight_id = tf.flight_id
INNER JOIN aircrafts_data ad on f.aircraft_code = ad.aircraft_code
GROUP BY ad.model
```

text	augustcount	august	septembercount	september
1 Аэробус A319-100	34574	1773787300	5688	287051800
2 Аэробус A321-200	67502	1050808500	14137	201035000
3 Боинг 737-300	55811	926462000	9583	160612800
4 Боинг 767-300	80623	2824723100	14037	495152100
5 Боинг 777-300	93951	2233327100	14431	341779800
6 Бомбардье CRJ-200	98171	1300530100	16074	211844700
7 Сессна 208 Караван	9545	62590400	1612	10499000