Задача A

```
select airport_code, coordinates from airports_data
where city = '{"en": "Moscow", "ru": "Москва"}' or city = '{"en": "Kazan", "ru":
"Казань"}'
order by airport_code desc;
```

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

Задача B

```
SELECT concat_ws(', ', airport_code, airport_name->'ru', city->'ru', coordinates,
timezone) AS full_information
FROM airports_data
order by full_information asc;
```

	full_information
1	AAQ, "Витязево", "Анапа", (37.347301483154,45.002101898193), Europe/Moscow
2	ABA, "Абакан", "Абакан", (91.38500213623047,53.7400016784668), Asia/Krasnoyarsk
3	AER, "Сочи", "Сочи", (39.956600189209,43.449901580811), Europe/Moscow
4	ARH, "Талаги", "Архангельск", (40.71670150756836,64.60030364990234), Europe/Moscow
5	ASF, "Астрахань", "Астрахань", (48.0063018799,46.2832984924), Europe/Samara
6	BAX, "Барнаул", "Барнаул", (83.53849792480469,53.363800048828125), Asia/Krasnoyarsk
7	BQS, "Игнатьево", "Благовещенск", (127.41200256347656,50.42539978027344), Asia/Yakutsk
8	BTK, "Братск", "Братск", (101.697998046875,56.370601654052734), Asia/Irkutsk
9	BZK, "Брянск", "Брянск", (34.176399231,53.214199066199996), Europe/Moscow
10	CEE, "Череповец", "Череповец", (38.015800476100004,59.273601532), Europe/Moscow
11	CEK, "Челябинск", "Челябинск", (61.5033,55.305801), Asia/Yekaterinburg
12	CNN, "Чульман", "Нерюнгри", (124.91400146484,56.913898468018), Asia/Yakutsk
13	CSY, "Чебоксары", "Чебоксары", (47.3473014831543,56.090301513671875), Europe/Moscow
14	DME, "Домодедово", "Москва", (37.90629959106445,55.40879821777344), Europe/Moscow
15	DYR, "Анадырь", "Анадырь", (177.74099731445312,64.73490142822266), Asia/Anadyr
16	EGO, "Белгород", "Белгород", (36.5900993347168,50.643798828125), Europe/Moscow
17	ESL, "Элиста", "Элиста", (44.33089828491211,46.3739013671875), Europe/Moscow
18	EYK, "Белоярский", "Белоярский", (66.698600769,63.686901092499994), Asia/Yekaterinburg
19	GDX, "Магадан", "Магадан", (150.72000122070312,59.9109992980957), Asia/Magadan
20	GDZ, "Геленджик", "Геленджик", (38.0124807358,44.5820926295), Europe/Moscow
21	GOJ, "Стригино", "Нижний Новгород", (43.784000396729,56.230098724365), Europe/Moscow
22	GRV, "Грозный", "Грозный", (45.78409957885742,43.298099517822266), Europe/Moscow
23	HMA, "Ханты-Мансийск", "Ханты-Мансийск", (69.08609771728516,61.028499603271484), Asia/Yekaterinburg

Задача C

```
select departure_airport, count(*) as count
from flights
where departure_airport in ('KZN', 'DME', 'OVB', 'IKT', 'LED', 'SVO')
group by departure_airport
order by count desc
;
```

	departure_airport	count
1	DME	6376
2	SVO	5912
3	LED	3769
4	OVB	2091
5	KZN	934
6	IKT	727

Задача D

```
select departure_airport, count(*) as count
from flights
where departure_airport not in ('KZN', 'DME', 'OVB', 'IKT', 'LED', 'SVO')
group by departure_airport
order by count asc
;
```

	departure_airport	count
1	USK	34
2	KXK	35
3	PYJ	51
4	NYA	51
5	PKC	52
6	IWA	68
7	GDX	70
8	DYR	70
9	KYZ	86
10	LPK	86
11	NFG	87
12	EYK	104
13	IJK	121
14	BTK	121
15	UKX	121
16	SWT	121
17	BQS	121
18	GRV	138
19	UUD	139
20	OSW	139
21	IAR	156
22	RGK	172
23	KEJ	173
24	PKV	190
25	HTA	191
26	GDZ	226
27	STW	241
28	OGZ	242

Задача E

```
select flight_id, scheduled_departure, count
from flights
join (select flight_id as fid, count(*) as count
from boarding_passes
group by flight_id
) on flights.flight_id = fid

where count between 27 and 90
order by flight_id desc
;
```

	flight_id	scheduled_departure	count
1	65420	2017-06-25 06:05:00.000000 +00:00	39
2	65419	2017-06-10 06:05:00.000000 +00:00	46
3	65418	2017-06-11 06:05:00.000000 +00:00	29
4	65417	2017-08-07 06:05:00.000000 +00:00	38
5	65414	2017-07-02 06:05:00.000000 +00:00	44
6	65413	2017-07-26 06:05:00.000000 +00:00	38
7	65407	2017-06-09 06:05:00.000000 +00:00	31
8	65405	2017-07-27 06:05:00.000000 +00:00	30
9	65402	2017-06-13 06:05:00.000000 +00:00	37
10	65401	2017-08-13 06:05:00.000000 +00:00	27
11	65396	2017-07-15 06:05:00.000000 +00:00	37
12	65394	2017-06-14 06:05:00.000000 +00:00	37
13	65392	2017-05-29 06:05:00.000000 +00:00	31
14	65391	2017-07-19 06:05:00.000000 +00:00	30
15	65390	2017-08-02 06:05:00.000000 +00:00	32
16	65389	2017-07-04 06:05:00.000000 +00:00	32
17	65388	2017-06-15 06:05:00.000000 +00:00	36
18	65385	2017-07-14 06:05:00.000000 +00:00	34
19	65384	2017-07-28 06:05:00.000000 +00:00	30
20	65383	2017-06-07 06:05:00.000000 +00:00	39
21	65382	2017-08-09 06:05:00.000000 +00:00	35
22	65381	2017-06-30 06:05:00.000000 +00:00	35
23	65377	2017-08-14 06:05:00.000000 +00:00	34
24	65373	2017-07-25 06:05:00.000000 +00:00	33
25	65372	2017-07-13 06:05:00.000000 +00:00	39
26	65371	2017-08-06 06:05:00.000000 +00:00	37
27	65370	2017-06-17 06:05:00.000000 +00:00	27
28	65368	2017-06-29 06:05:00.000000 +00:00	27

Задача F

```
select distinct passenger_name, departure_airport, arrival_airport
from boarding_passes

join flights on boarding_passes.flight_id = flights.flight_id
join tickets on tickets.ticket_no = boarding_passes.ticket_no

;
```

	passenger_name	departure_airport	arrival_airport
1	EKATERINA EGOROVA	DME	LED
2	ANDREY ANDREEV	SVO	KJA
3	ELENA DENISOVA	SVO	AER
4	TAMARA YAKOVLEVA	CEK	DME
5	REGINA IVANOVA	PEE	GOJ
6	DANIIL PETROV	CEK	VOG
7	EVGENIYA KUZNECOVA	DME	LED
8	ZINAIDA LUKYANOVA	SVO	KJA
9	DANILA SERGEEV	DME	NUX
10	MARIYA BORISOVA	VKO	PEE
11	ALEKSEY SHEVCHENKO	GOJ	LED
12	ALMIRA KUZNECOVA	ROV	DME
13	BORIS OSIPOV	KVX	KZN
14	NIKOLAY POPOV	LED	REN
15	SERGEY MAKAROV	DME	URJ
16	EKATERINA TIKHONOVA	NUX	SVO
17	VALERIY BARANOV	SVO	MJZ
18	DANIIL NAZAROV	MRV	DME
19	ANDREY NIKITIN	SVX	SVO
20	EVGENIY BORISOV	LED	KHV
21	YURIY SOROKIN	VKO	AER
22	MARIYA ISAEVA	KJA	KRO
23	NIKITA KISELEV	KHV	UUS
24	YURIY MEDVEDEV	DME	ROV
25	ANATOLIY SMIRNOV	PKC	DME
26	VIKTORIYA KOLESNIKOVA	AER	SVO
27	DIANA ILINA	AER	SVO
28	VADIM BORISOV	SVO	ROV

Задача G

```
select distinct passenger_name as data, 'Пассажир' as data_type
from boarding_passes

join flights on boarding_passes.flight_id = flights.flight_id
join tickets on tickets.ticket_no = boarding_passes.ticket_no


UNION

select airport_name->>'ru' as data, 'Аэропорт' as data_type
from airports_data

order by data_type desc, data asc
;
```

	data	data_type
26724	ZULFIYA TROFIMOVA	Пассажир
26725	ZULFIYA VASILEVA	Пассажир
26726	ZULFIYA VLASOVA	Пассажир
26727	ZULFIYA VOLKOVA	Пассажир
26728	ZULFIYA VOROBEVA	Пассажир
26729	ZULFIYA YAKOVLEVA	Пассажир
26730	ZULFIYA YUDINA	Пассажир
26731	ZULFIYA ZAKHAROVA	Пассажир
26732	ZULFIYA ZAYCEVA	Пассажир
26733	ZULFIYA ZHUKOVA	Пассажир
26734	ZULFIYA ZHURAVLEVA	Пассажир
26735	ZULFIYA ZOTOVA	Пассажир
26736	Абакан	Аэропорт
26737	Анадырь	Аэропорт
26738	Астрахань	Аэропорт
26739	Байкал	Аэропорт
26740	Баратаевка	Аэропорт
26741	Барнаул	Аэропорт
26742	Бегишево	Аэропорт
26743	Белгород	Аэропорт
26744	Белоярский	Аэропорт
26745	Беслан	Аэропорт
26746	Бесовец	Аэропорт

Задача H

```
select count(*)
from flights
left outer join boarding_passes
    on flights.flight_id = boarding_passes.flight_id

where boarding_passes.ticket_no is null
group by ticket_no
;
```

	count
1	31198

Задача J

```
select flights.flight_no as flight_no, min(bookings.total_amount) as min_price,
max(bookings.total_amount) as max_price
from flights
join boarding_passes on flights.flight_id = boarding_passes.flight_id
join tickets on tickets.ticket_no = boarding_passes.ticket_no
join bookings on tickets.book_ref = bookings.book_ref
group by flights.flight_no
order by flights.flight_no asc
;
```

	flight_no	min_price	max_price
1	PG0012	24600	99600
2	PG0013	14000	1204500
3	PG0014	40000	236300
4	PG0015	37400	116000
5	PG0016	37400	116000
6	PG0019	19000	106200
7	PG0020	19000	106200
8	PG0029	10600	42400
9	PG0030	10600	31800
10	PG0032	10600	42400
11	PG0035	106400	558500
12	PG0038	117600	558500
13	PG0039	21800	156400
14	PG0040	21800	156400
15	PG0041	41800	169300
16	PG0042	47200	278400
17	PG0043	19800	131400
18	PG0044	19800	131400
19	PG0045	29200	116800
20	PG0046	29200	116800
21	PG0049	24600	99600
22	PG0050	14400	204900
23	PG0051	14400	204900
24	PG0052	38600	219300