Задание 4.1

1.

SELECT city,

count(airport\_code)

FROM dst\_project.airports

GROUP BY 1

HAVING count(airport\_code)>1

ORDER BY 1

Задание 4.2

1.

SELECT count(DISTINCT status)

FROM dst\_project.flights

ORDER BY 1

2.

SELECT count(DISTINCT flight\_no)

FROM dst\_project.flights

WHERE status='Departed'

3.

SELECT DISTINCT count(DISTINCT s.seat\_no)

FROM dst\_project.aircrafts a

JOIN dst\_project.seats s ON a.aircraft\_code=s.aircraft\_code

WHERE a.model = 'Boeing 777-300'

4.

SELECT count(DISTINCT flight\_id)

FROM dst\_project.flights

WHERE scheduled\_arrival BETWEEN '2017/04/01'::date AND '2017/09/01'::date

AND status = 'Arrived'

Задание 4.3

1.

SELECT count(DISTINCT flight\_id)

FROM dst\_project.flights

WHERE status = 'Cancelled'

2.

SELECT substring(model, 1, 6),

count(model)

FROM dst\_project.aircrafts

GROUP BY 1

3.

SELECT count(DISTINCT airport\_name),

substring(timezone, 1, 4) reg

FROM dst\_project.airports

GROUP BY 2

4.

SELECT flight\_id,

flight\_no,

actual\_arrival,

scheduled\_departure,

actual\_arrival - scheduled\_arrival nn,

status

FROM dst\_project.flights

WHERE actual\_arrival > scheduled\_departure

ORDER BY 5 DESC

LIMIT 1

Задание 4.4

1.

SELECT DISTINCT scheduled\_departure

FROM dst\_project.flights

ORDER BY 1

LIMIT 1

2.-3.

SELECT DISTINCT arrival\_airport,

departure\_airport,

date\_part('hour', scheduled\_arrival - scheduled\_departure) \* 60 + date\_part('minute', scheduled\_arrival - scheduled\_departure)

FROM dst\_project.flights

ORDER BY 3 DESC

LIMIT 4

4.

WITH a AS

(SELECT avg(f.scheduled\_arrival - f.scheduled\_departure) mm

FROM dst\_project.flights f)

SELECT date\_part('hour', a.mm) \* 60 + date\_part('minute', a.mm)

FROM a

Задание 4.5

1.

SELECT fare\_conditions,

count(seat\_no)

FROM dst\_project.seats

WHERE aircraft\_code = 'SU9'

GROUP BY 1

2.

SELECT min(total\_amount)

FROM dst\_project.bookings

3.

SELECT seat\_no

FROM dst\_project.tickets t

JOIN dst\_project.boarding\_passes b ON t.ticket\_no = b.ticket\_no

WHERE passenger\_id = '4313 788533'

Задание 5.1

1.

SELECT count(flight\_id)

FROM dst\_project.flights\_v

WHERE arrival\_city = 'Анапа'

AND actual\_arrival\_local BETWEEN '2017/01/01'::date AND '2017/12/31'::date

2.

SELECT count(flight\_id)

FROM dst\_project.flights\_v

WHERE departure\_city = 'Анапа'

AND actual\_departure\_local BETWEEN '2017/01/01'::date AND '2017/03/01'::date

3.

SELECT count(flight\_id)

FROM dst\_project.flights\_v

WHERE departure\_city = 'Анапа'

AND status = 'Cancelled'

4.

SELECT count(DISTINCT flight\_id)

FROM dst\_project.flights\_v

WHERE departure\_city = 'Анапа'

AND arrival\_city != 'Москва'

5.

WITH air AS

(SELECT s.aircraft\_code,

a.model model\_,

count(s.seat\_no) seat\_

FROM dst\_project.seats s

JOIN dst\_project.aircrafts a ON s.aircraft\_code = a.aircraft\_code

GROUP BY 1,

2)

SELECT DISTINCT air.model\_,

air.seat\_

FROM dst\_project.flights f

JOIN air ON f.aircraft\_code=air.aircraft\_code

WHERE f.arrival\_airport = 'AAQ'

Финальное задание – запрос

WITH t AS

(--стоимость проданных билетов по рейсам

SELECT flight\_id,

sum(amount) sum\_tickets,

count(ticket\_no) count\_tickets,

avg(amount) avg\_tickets

FROM dst\_project.ticket\_flights

GROUP BY 1),

a AS

(--характеристики самолета по количеству мест

SELECT aircraft\_code,

count(seat\_no) seats\_all

FROM dst\_project.seats

GROUP BY 1),

b AS

(--расчет длительности полетов в минутах)

SELECT f.flight\_id,

f.scheduled\_arrival - f.scheduled\_departure AS time\_fly

FROM dst\_project.flights f)

SELECT f.flight\_id,

f.flight\_no,

f.scheduled\_departure::date,

date\_part('month', f.scheduled\_departure) month\_,

f.departure\_airport dep\_air,

f.arrival\_airport arr\_air,

f.aircraft\_code air\_code,

c.model,

a.seats\_all,

t.sum\_tickets::int,

t.count\_tickets::int,

t.avg\_tickets::int,

date\_part('hour', b.time\_fly) \* 60 + date\_part('minute', b.time\_fly) time\_fly\_min,

t.count\_tickets/a.seats\_all::float zapoln\_air

FROM dst\_project.flights f

LEFT JOIN a ON f.aircraft\_code = a.aircraft\_code

LEFT JOIN t ON t.flight\_id=f.flight\_id

LEFT JOIN b ON b.flight\_id=f.flight\_id

LEFT JOIN dst\_project.aircrafts c ON f.aircraft\_code=c.aircraft\_code

WHERE departure\_airport = 'AAQ'

AND (date\_trunc('month', scheduled\_departure) in ('2017-01-01',

'2017-02-01',

'2017-12-01'))

AND status not in ('Cancelled')

ORDER BY zapoln\_air