4.1

**SELECT** a.city,

**count**(a.airport\_name) **AS** airport\_count

**FROM** dst\_project.airports a

**GROUP** **BY** a.city

**ORDER** **BY** 2 **DESC**

4.2.1

**SELECT** **count**(**DISTINCT** f.status)

**FROM** dst\_project.FLIGHTS f

Задание 4.2.2

**SELECT** **count**(**DISTINCT** flight\_no)

**FROM** dst\_project.FLIGHTS f

**WHERE** f.status = 'Departed'

Задание 4.2.3  
  
**SELECT** **DISTINCT** s.aircraft\_code,

**count**(**DISTINCT** s.seat\_no)

**FROM** dst\_project.SEATS s

**WHERE** aircraft\_code = '773'

**GROUP** **BY** s.aircraft\_code

4.2.4  
  
**SELECT** **count**(f.flight\_id)

**FROM** dst\_project.FLIGHTS f

**WHERE** f.status = 'Arrived'

**AND** (f.actual\_arrival **BETWEEN** '2017-04-01' **AND** '2017-09-01')

4.3.1  
  
**SELECT** **count**(f.flight\_no)

**FROM** dst\_project.FLIGHTS f

**WHERE** f.status = 'Cancelled'

4.3.2  
  
**SELECT** a.model,

**count**(a.model)

**FROM** dst\_project.AIRCRAFTS a

**WHERE** a.model **like** 'Boeing%'

**OR** a.model **like** 'Sukhoi%'

**OR** a.model **like** 'Airbus%'

**GROUP** **BY** a.model

4.3.3  
  
Ищем кол-во аэропортов в Азии – 52

**SELECT** **count**(a.timezone)

**FROM** dst\_project.AIRPORTS a

**WHERE** a.timezone **like** 'Asia%'

Ищем кол-во аэропортов в Европе – 52

**SELECT** **COUNT** (a.timezone)

**FROM** dst\_project.AIRPORTS a

**WHERE** a.timezone **like** 'Europe%'

В Австралии нет аэропортов  
  
4.3.4  
  
**SELECT** f.flight\_id,

f.actual\_arrival - f.scheduled\_arrival **AS** var

**FROM** dst\_project.FLIGHTS f

**WHERE** status = 'Arrived'

**GROUP** **BY** f.flight\_id

**ORDER** **BY** 2 **DESC**

**LIMIT** 1

4.4.1  
  
**SELECT** scheduled\_departure

**FROM** dst\_project.FLIGHTS f

**ORDER** **BY** scheduled\_departure

**LIMIT** 1

4.4.2  
  
**SELECT** **DISTINCT** date\_part('minute', f.scheduled\_arrival-f.scheduled\_departure)+date\_part('hour', f.scheduled\_arrival-f.scheduled\_departure)\*60 **AS** var

**FROM** dst\_project.FLIGHTS f

**ORDER** **BY** var **DESC**

**LIMIT** 1

4.4.3  
  
**SELECT** departure\_airport,

arrival\_airport

**FROM** dst\_project.flights

**ORDER** **BY** scheduled\_arrival - scheduled\_departure **DESC**

**LIMIT** 1

4.4.4  
  
**SELECT** **avg**(**extract**(epoch

**FROM** (f.scheduled\_arrival - f.scheduled\_departure))) / 60 **AS** duration\_minutes

**FROM** dst\_project.flights **AS** f

4.5.1  
  
**SELECT** **DISTINCT** s.fare\_conditions,

**count**(s.fare\_conditions)

**FROM** dst\_project.aircrafts a

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

**WHERE** a.aircraft\_code = 'SU9'

**GROUP** **BY** s.fare\_conditions

4.5.2  
  
**SELECT** **min**(total\_amount)

**FROM** dst\_project.bookings b

4.5.3  
  
**SELECT** bs.seat\_no

**FROM** dst\_project.tickets **AS** t

**LEFT** **JOIN** dst\_project.boarding\_passes **AS** bs **ON** t.ticket\_no = bs.ticket\_no

**WHERE** t.passenger\_id = '4313 788533'

5.1  
  
**SELECT** **count**(flight\_id)

**FROM** dst\_project.flights f

**WHERE** f.arrival\_airport = 'AAQ'

**AND** f.status = 'Arrived'

**AND** date\_part('year', actual\_arrival)=2017

5.2  
  
**SELECT** **count**(f.flight\_id)

**FROM** dst\_project.flights f

**WHERE** f.departure\_airport = 'AAQ'

**AND** f.status = 'Arrived'

**AND** date\_part('year', f.actual\_arrival)=2017

**AND** (date\_part('month', f.actual\_arrival)=1

**OR** date\_part('month', f.actual\_arrival)=2

**OR** date\_part('month', f.actual\_arrival)=12)

5.3  
  
**SELECT** **count**(\*)

**FROM** dst\_project.flights f

**WHERE** f.departure\_airport = 'AAQ'

**AND** f.status = 'Cancelled'

5.4  
  
**SELECT** **count**(\*)

**FROM** dst\_project.flights f

**WHERE** f.departure\_airport = 'AAQ'

**AND** f.arrival\_airport **not** **in** ('SVO',

'VKO',

'DME')

5.5  
  
**SELECT** **DISTINCT** a.model,

**COUNT** (**DISTINCT** s.seat\_no) **AS** seat\_num

**FROM** dst\_project.flights f

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

**LEFT** **JOIN** dst\_project.seats s **ON** f.aircraft\_code = s.aircraft\_code

**WHERE** f.departure\_airport = 'AAQ'

**GROUP** **BY** a.model

**ORDER** **BY** 2 **DESC**

**LIMIT** 1

Финальный код для презентации:

**SELECT** f.flight\_id,

f.actual\_departure,

f.departure\_airport,

(**CASE**

**WHEN** f.departure\_airport = 'AAQ' **THEN** 37.20

**END**) **AS** AAQ\_longitude,

(**CASE**

**WHEN** f.departure\_airport = 'AAQ' **THEN** 45.00

**END**) **AS** AAQ\_latitude,

f.arrival\_airport,

a.longitude,

a.latitude,

(**CASE**

**WHEN** a.city = 'Moscow' **THEN** 1206

**ELSE** 638

**END**) **AS** distance,

a.airport\_name,

a.city,

ar.model,

(**CASE**

**WHEN** f.departure\_airport = 'AAQ' **THEN** 47100

**END**) **AS** fuel\_cost,

(**CASE**

**WHEN** ar.model = 'Boeing 737-300' **THEN** 126

**ELSE** 103

**END**) **AS** total\_seats,

**count**(**CASE**

**WHEN** tf.fare\_conditions = 'Economy' **THEN** tf.fare\_conditions

**END**) **AS** ticket\_economy,

**count**(**CASE**

**WHEN** tf.fare\_conditions = 'Business' **THEN** tf.fare\_conditions

**END**) **AS** ticket\_business,

(**CASE**

**WHEN** tf.fare\_conditions = 'Economy' **THEN** **sum**(tf.amount)

**END**) **AS** total\_economy,

(**CASE**

**WHEN** tf.fare\_conditions = 'Business' **THEN** **sum**(tf.amount)

**END**) **AS** total\_business

**FROM** dst\_project.flights **AS** f

**JOIN** dst\_project.ticket\_flights **AS** tf **ON** f.flight\_id = tf.flight\_id

**JOIN** dst\_project.airports a **ON** f.arrival\_airport = a.airport\_code

**JOIN** dst\_project.aircrafts ar **ON** f.aircraft\_code = ar.aircraft\_code

**WHERE** departure\_airport = 'AAQ'

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

'2017-02-01',

'2017-12-01'))

**AND** f.status **not** **in** ('Cancelled')

**GROUP** **BY** f.flight\_id,

tf.fare\_conditions,

a.airport\_name,

a.city,

a.longitude,

a.latitude,

ar.model

**ORDER** **BY** f.flight\_id