Задание 4.1

**SELECT** ap.city,

**COUNT** (ap.airport\_code)

**FROM** dst\_project.airports ap

**GROUP** **BY** ap.city

**HAVING** **COUNT** (ap.airport\_code) > 1

### Задание 4.2.1

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

**FROM** dst\_project.flights f

### Задание 4.2.2

**SELECT** **COUNT** (f.status)

**FROM** dst\_project.flights f

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

### Задание 4.2.3

**SELECT** **COUNT** (s.seat\_no)

**FROM** dst\_project.aircrafts ac

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

**WHERE** ac.model = 'Boeing 777-300'

### Задание 4.2.4

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

**FROM** dst\_project.flights f

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

**AND** f.actual\_arrival **BETWEEN** '2017-4-1' **AND** '2017-8-31'

### Задание 4.3.1

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

**FROM** dst\_project.flights f

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

### Задание 4.3.2

**SELECT** ac.model

**FROM** dst\_project.aircrafts ac

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

### Задание 4.3.2

**SELECT** ac.model

**FROM** dst\_project.aircrafts ac

**WHERE** ac.model **like** '%Sukhoi Superjet%'

### Задание 4.3.2

**SELECT** ac.model

**FROM** dst\_project.aircrafts ac

**WHERE** ac.model **like** '%Airbus%'

### Задание 4.3.3

**SELECT** **count**(ap.timezone)

**FROM** dst\_project.airports ap

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

### Задание 4.3.4

**SELECT** f.flight\_id

**FROM** dst\_project.flights f

**ORDER** **BY** f.scheduled\_departure - f.actual\_departure

**LIMIT** 1

### Задание 4.4.1

**SELECT** f.scheduled\_departure

**FROM** dst\_project.flights f

**ORDER** **BY** f.scheduled\_departure

**LIMIT** 1

### Задание 4.4.2

**SELECT** date\_part('hour', **max**(f.scheduled\_arrival - f.scheduled\_departure)) \* 60 + date\_part('minute', **max**(f.scheduled\_arrival - f.scheduled\_departure)) **AS** flight\_time\_mm

**FROM** dst\_project.flights f

### Задание 4.4.3

**SELECT** f.departure\_airport,

f.arrival\_airport

**FROM** dst\_project.flights f

**WHERE** (f.departure\_airport = 'DME'

**AND** f.arrival\_airport = 'UUS')

**OR** (f.departure\_airport = 'DME'

**AND** f.arrival\_airport = 'AAQ')

**OR** (f.departure\_airport = 'DME'

**AND** f.arrival\_airport = 'PCS')

**OR** (f.departure\_airport = 'SVO'

**AND** f.arrival\_airport = 'UUS')

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

**LIMIT** 1

### Задание 4.4.4

**SELECT** date\_part('hour', **avg**(f.scheduled\_arrival - f.scheduled\_departure)) \* 60 + date\_part('minute', **avg**(f.scheduled\_arrival - f.scheduled\_departure)) **AS** AVG\_flight\_time\_mm

**FROM** dst\_project.flights f

### Задание 4.5.1

**SELECT** s.fare\_conditions

**FROM** dst\_project.seats s

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

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

**ORDER** **BY** **count**(s.seat\_no) **DESC**

**LIMIT** 1

### Задание 4.5.2

**SELECT** **min**(bk.total\_amount)

**FROM** dst\_project.bookings bk

### Задание 4.5.3

**SELECT** bp.seat\_no

**FROM** dst\_project.ticket\_flights tf

**JOIN** dst\_project.tickets tk **ON** tf.ticket\_no = tk.ticket\_no

**JOIN** dst\_project.boarding\_passes bp **ON** tf.ticket\_no = bp.ticket\_no

**WHERE** tk.passenger\_id = '4313 788533'

### Задание 5.1.1

**SELECT** **COUNT** (f.flight\_id)

**FROM** dst\_project.flights f

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

**WHERE** ap.city = 'Anapa'

**AND** f.actual\_arrival **BETWEEN** '2017-1-1' **AND** '2017-12-31'

### Задание 5.1.2

**SELECT** **COUNT** (f.flight\_id)

**FROM** dst\_project.flights f

**JOIN** dst\_project.airports ap **ON** f. departure\_airport = ap.airport\_code

**WHERE** ap.city = 'Anapa'

**AND** f.actual\_departure **BETWEEN** '2017-1-1' **AND** '2017-12-31'

**AND** f.actual\_departure **NOT** **BETWEEN** '2017-3-1' **AND** '2017-11-30'

### Задание 5.1.3

**SELECT** **COUNT** (f.flight\_id)

**FROM** dst\_project.flights f

**JOIN** dst\_project.airports ap **ON** f. departure\_airport = ap.airport\_code

**WHERE** ap.city = 'Anapa'

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

### Задание 5.1.4

**SELECT** ac.model

**FROM** dst\_project.flights f

**JOIN** dst\_project.airports ap **ON** f.departure\_airport = ap.airport\_code

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

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

**WHERE** ap.city = 'Anapa'

**GROUP** **BY** ac.model

**ORDER** **BY** **COUNT** (**DISTINCT** s.seat\_no) **DESC**

**LIMIT** 1

### ПРОЕКТ 4. АВИАРЕЙСЫ БЕЗ ПОТЕРЬ

**SELECT** tf.flight\_id,

f.departure\_airport,

f.arrival\_airport,

a.model,

f.actual\_arrival - f.actual\_departure **AS** flight\_time\_mm,

bk.book\_date,

tf.fare\_conditions,

tf.amount

**FROM** dst\_project.bookings bk

**JOIN** dst\_project.tickets tk **ON** bk.book\_ref = tk.book\_ref

**JOIN** dst\_project.ticket\_flights tf **ON** tk.ticket\_no = tf.ticket\_no

**FULL** **OUTER** **JOIN** dst\_project.flights f **ON** tf.flight\_id = f.flight\_id *-- full outer используется, чтобы попали строчки про рейсы в NOZ т.к. в таблице Tiket\_flights отсутствует информация по этим рейсам*

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

**WHERE** f.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')

**ORDER** **BY** tf.flight\_id,

tf.amount **DESC**