**запрос:**

with

first\_payments as

(select user\_id

, min(date\_trunc('day', transaction\_datetime)) as first\_payment\_date

from skyeng\_db.payments

where status\_name = 'success'

group by user\_id

),

all\_dates as

(select distinct class\_start\_datetime::date as dt

from skyeng\_db.classes

where date\_trunc('year', class\_start\_datetime) = '2016-01-01'

),

payments\_by\_dates as

(select user\_id

, transaction\_datetime::date as payment\_date

, sum(classes) as transaction\_balance\_change

from skyeng\_db.payments

where status\_name ='success'

group by user\_id, payment\_date

),

all\_dates\_by\_user as

(select user\_id

, dt

from all\_dates a

join first\_payments b on a.dt >= b.first\_payment\_date

),

classes\_by\_dates as

(select user\_id

, class\_start\_datetime::date as class\_date

, count(id\_class) \* (-1) as classes

from skyeng\_db.classes

where class\_status in ('success', 'failed\_by\_student')

and class\_type != 'trial'

group by user\_id, class\_date

),

payments\_by\_dates\_cumsum as

(select a.user\_id

, dt

, transaction\_balance\_change

, sum(coalesce(transaction\_balance\_change,0)) over (partition by a.user\_id order by dt) as transaction\_balance\_change\_cs

from all\_dates\_by\_user a

left join payments\_by\_dates b on a.user\_id = b.user\_id

and a.dt = b.payment\_date

),

classes\_by\_dates\_dates\_cumsum as

(select a.user\_id

, dt

, classes

, sum(classes) over (partition by a.user\_id order by dt) as classes\_cs

from all\_dates\_by\_user a

left join classes\_by\_dates b on a.user\_id = b.user\_id

and a.dt = b.class\_date

),

balances as

(select a.user\_id

, a.dt

, transaction\_balance\_change

, transaction\_balance\_change\_cs

, classes

, classes\_cs

, (classes\_cs + transaction\_balance\_change\_cs) as balance

from payments\_by\_dates\_cumsum a

join classes\_by\_dates\_dates\_cumsum b on a.user\_id = b.user\_id

and a.dt = b.dt

)

select dt

, sum(transaction\_balance\_change) as sum\_transaction\_balance\_change

, sum(transaction\_balance\_change\_cs) as sum\_transaction\_balance\_change\_cs

, sum(classes) as sum\_classes

, sum(classes\_cs) as sum\_classes\_cs

, sum(balance) as sum\_balance

from balances

group by dt

order by dt

limit 1000