with first\_payments as -- шаг 1

(

select

user\_id

, min (transaction\_datetime)::date as first\_payment\_date

from SKYENG\_DB.payments

where status\_name = 'success'

group by user\_id

),

all\_dates as -- шаг 2

(select

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

from SKYENG\_DB.classes

where class\_start\_datetime between '2016-01-01 00:00' and '2016-12-31 23:59'

),

all\_dates\_by\_user as -- шаг 3

(

select b.user\_id

, a.dt

from all\_dates a

join first\_payments b

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

order by b.user\_id asc, a.dt asc

),

payments\_by\_dates as -- шаг 4

(

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

order by user\_id

),

payments\_by\_dates\_cumsum as --шаг 5

(

select --\*

a.user\_id

,a.dt

,coalesce (transaction\_balance\_change, 0) transaction\_balance\_change

,sum (coalesce (transaction\_balance\_change, 0)) over (partition by a.user\_id order by a.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 b.payment\_date=a.dt

),

classes\_by\_dates as --шаг 6

(

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

),

classes\_by\_dates\_dates\_cumsum as --шаг 7

(

select

a.user\_id

, a.dt

, coalesce (b.classes, 0) classes

, sum (coalesce (b.classes, 0)) over (partition by a.user\_id order by a.dt) as classes\_cs

from all\_dates\_by\_user a

left join classes\_by\_dates b

on a.user\_id=b.user\_id

and b.class\_date=a.dt

),

balances as --шаг 8

(

Select

a.user\_id

, a.dt

, a.transaction\_balance\_change

, a.transaction\_balance\_change\_cs

, b.classes

, b.classes\_cs

, (b.classes\_cs + a.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 b.dt=a.dt

-- order by a.user\_id, a.dt

--limit 1000

)

Select

dt

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

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

, sum (classes) as classes

, sum (classes\_cs) as classes\_cs

, sum (balance) as balance

from balances

group by dt

order by dt