--select\* from SKYENG\_DB.payments where status\_name='refunded' or status\_name='credit\_skipped'

-- select\* from SKYENG\_DB.classes

with

first\_payments as --шаг 1

(

select

user\_id

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

from SKYENG\_DB.payments

where status\_name='success'

group by 1

),

all\_dates as --шаг 2

(

select

distinct date\_trunc('day',class\_start\_datetime) dt

from SKYENG\_DB.classes

where date\_part('year',class\_start\_datetime)=2016

order by dt asc

),

all\_dates\_by\_user as --шаг 3

(

select

user\_id

,dt

from first\_payments

join all\_dates

on first\_payments\_date<=dt

),

payments\_by\_dates as --шаг 4

(

select

user\_id

,date\_trunc('day',transaction\_datetime) as payment\_date

,sum(classes) as transaction\_balance\_change

from SKYENG\_DB.payments

where

status\_name='success'

group by 1,2

),

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

(

select

adu.user\_id

,dt

,COALESCE(transaction\_balance\_change,0) as transaction\_balance\_change

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

from all\_dates\_by\_user adu

left join payments\_by\_dates pbd

on adu.user\_id=pbd.user\_id and dt=payment\_date

),

classes\_by\_dates as --шаг 6

(

select

user\_id

,date\_trunc('day',class\_start\_datetime) 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 1,2

),

classes\_by\_dates\_dates\_cumsum as --шаг7

(

select

adu.user\_id

,dt

,COALESCE(classes,0) as classes

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

from all\_dates\_by\_user adu

left join classes\_by\_dates cbu

on adu.user\_id=cbu.user\_id and dt=class\_date

),

balances as --швг 8

(

select

user\_id

,dt

,transaction\_balance\_change

,transaction\_balance\_change\_cs

,classes

,classes\_cs

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

from payments\_by\_dates\_cumsum

join classes\_by\_dates\_dates\_cumsum

using(user\_id,dt)

)

-- select \*

-- from balances

-- limit 1000

select --шаг 9

dt

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

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

,sum(classes) as classes\_sum

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

,sum(balance) as balance\_sum

from balances

group by 1

order by 1

--Задание 1.вопрос к разработчикам.есть поля status\_name='credit\_skipped' и 'refunded' .почему не используем хотя по первому есть транзакции и количество уроков.

--Задание 2. пик покупок приходится в большей степени на начало и конец месяца а также на конец года(возможно связано с рекламой).баланс положительный и рост к концу года почти на 4500 .

--неравномерность прохождения уроков

--студентами (в начале года медленно проходят к концу года быстрее).Возможно нет контроля и стимулов для быстрейшего мзучения материала(как например есть в skypro)