```
 with months as
(
  select
  '2017-01-01' as first_day, '2017-01-31' as last_day
  union
  select
  '2017-02-01' as first_day, '2017-02-28' as last_day
  union
  select
  '2017-03-01' as first_day, '2017-03-31' as last_day
),
cross_join as
(select *
  from subscriptions
  cross join months
),
status as
(select id,
 first_day as month,
 case
   when (subscription_start < first_day) and (subscription_end > first_day or
subscription_end is null) and (segment = 87) then 1
   else 0
 end as is_active_87,
 case
   when (subscription_start < first_day) and (subscription_end > first_day or
subscription_end is null) and (segment = 30) then 1
   else 0
 end as is_active_30,
 case
   when (subscription_end between first_day and last_day) and (segment = 87) then 1
   else 0
 end as is_canceled_87,
 case
   when (subscription_end between first_day and last_day) and (segment = 30) then 1
   else 0
 end as is_canceled_30
from cross_join
),
status_aggregate as
(select month,
sum(is_active_87) as sum_active_87, sum(is_active_30) as sum_active_30,
sum(is_canceled_87) as sum_canceled_87, sum(is_canceled_30) as
sum_canceled_30
from status
 group by month
),
```

```
churn_rate as
( select month, 1.0*sum_canceled_87/sum_active_87 as churn_rate_87,
1.0*sum_canceled_30/sum_active_30 as churn_rate_30
 from status_aggregate
)
```