Select \*

From subscriptions

Limit 100;

How many different segments do you see? **Two, segments 30 and 87**.

Select MIN(subscription\_start)

From subscriptions;

Select Max(subscription\_start)

From subscriptions;

Select MIN(subscription\_end)

From subscriptions;

Select Max(subscription\_end)

From subscriptions;

January 2017, February 2017, March 2017

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

) Select \* From months;

),

cross\_join AS

(SELECT \*

FROM subscriptions

Cross JOIN months)

Select \*

From cross\_join

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

) SELECT \* FROM status LIMIT 10;

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

)

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;