# code cademy

SQL from Scratch

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## **Get familiar with Codeflix**

How many months has the company been operating?

Codeflix has been operating for 4 months, December 2016 through March 2017.

Which months do you have enough information to calculate a churn rate?

Churn rate is calculable for January, February, and March of 2017.

What segments of users exist?

There are two segments identified, one labeled as '87' and the other as '30'.

Query Results				
id	subscription_start	subscription_end	segment	
2000	2017-03-30	Ø	30	
1994	2017-03-30	Ø	87	
MIN(su	MIN(subscription_start)		MAX(subscription_end)	
2016-12-01		2017-03-31		

### Overall churn trend since inception

What is the overall churn trend since the company started?

The macro trend is that churn is increasing month over month.

Query Results				
month	churn_87	churn_30		
2016-12-01	Ø	Ø		
2017-01-01	0.25	0.08		
2017-02-01	0.32	0.07		
2017-03-01	0.49	0.12		

```
status_aggregrate AS (
SELECT month,
  SUM(is active 87) AS 'sum active 87',
  SUM(is canceled 87) AS 'sum canceled 87',
  SUM(is active 30) AS 'sum active 30',
  SUM(is canceled 30) AS 'sum canceled 30'
FROM status
GROUP BY month)
SELECT month,
  ROUND(1.0 * sum canceled 87 / sum active 87, 2) AS 'churn 87',
  ROUND(1.0 * sum canceled 30 / sum active 30, 2) AS 'churn 30'
FROM status aggregrate
LIMIT 200;
```

#### Compare churn rates between user segments

Segment 87 exhibits a greatly increased baseline churn of 25% with a month over month average increase of 12%, while the 30 segment has a baseline of 7% and a MoM average increase of only 1.5%.

# Which segment of users should the company focus on expanding?

Based on the above churn rates, the company should heavily focus on expanding segment 30.

Query Results				
month	churn_87	churn_30		
2016-12-01	Ø	Ø		
2017-01-01	0.25	0.08		
2017-02-01	0.32	0.07		
2017-03-01	0.49	0.12		