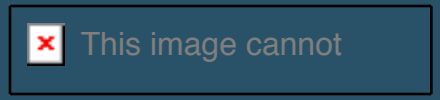


Calculating churn rate project

Learn SQL from Scratch

Questions:

1. How many months has the company been operating? Which months do you have enough information to calculate a churn rate? What segments of users exist?
2. What is the overall churn rate by month?
3. Compare the churn rates between segments

Getting familiar with the data

We have information for the 2016-12-01 until 2017-03-30
Which is a total of 4 months. But as we don't have information on subscription start of December we can not calculate the churn rate for that month. Because in order to calculate the churn rate for a period of a month the subscription start must be prior to that month.

test.sqlite

```
1
2  SELECT MIN(subscription_start) AS 'earliest
   start date',
3  MAX(subscription_start) AS 'latest start date'
4  FROM subscriptions;
```

Query Results

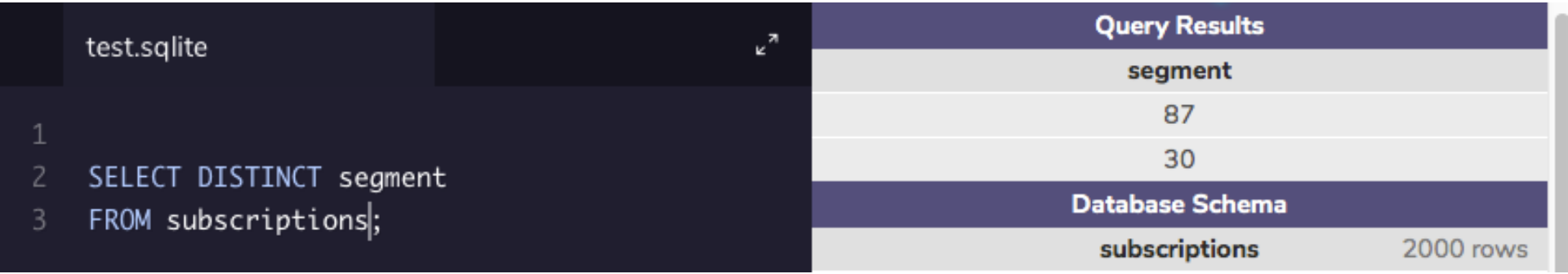
earliest start date	latest start date
2016-12-01	2017-03-30

Database Schema

subscriptions	2000 rows
id	INTEGER
subscription_start	TEXT
subscription_end	TEXT

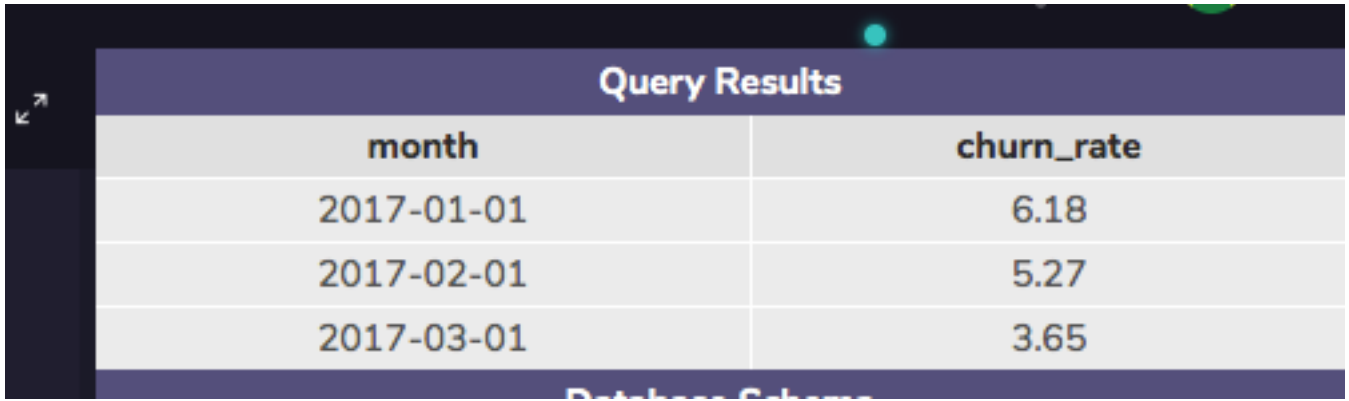
Number of segments that exist

b. What segments of users exist?
There are two segments. 87 and 30.



Overall churn rate by month

The overall churn rate is decreasing as we go forward. It means that the overall performance of the Codeflix company during the first 3 months of 2017 is improving.



Query Results

month	churn_rate
2017-01-01	6.18
2017-02-01	5.27
2017-03-01	3.65

As we see the overall churn rate for the first 3 month of 2017 is deceasing from 6.18 to 3.65.
This data is calculated without taking into consideration the 2 different segments.

Overall churn rate by segments

Below is the data calculated based on the 2 different segments.

Query Results		
month	churn_rate87	churn_rate30
2017-01-01	3.97	13.23
2017-02-01	3.12	13.63
2017-03-01	2.06	8.52
Database Schema		

As we see the churn rate is decreasing for the 2 segments.
Churn rate for segment 87 decreases from 3.97 in the first month to 2.06 in the last month and churn rate for segment 30 decreases from 13.23 in the first month to 8.52 to last month.

the segment to be expanded based on data

Based on the data analysis, segment of users the company should focus on expanding is segment 87. because overall performance of this segment is much better and the churn rate is much less than the segment 30.