

# Codeflix Churn Rates

Calculating Churn Rates with SQL

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**1. How many segments of customers are there in the data?**

## 1.1 Overview and Segments

The following represents an overview of the dataset.

- The identified columns are customer id, date they started their subscription, date they ended their subscription (N/A if they're still an active customer), and the segment they belong to
- There are **two** segments of customers in the dataset, represented by the numbers **30** and **87**

id	subscription_start	subscription_end	segment
1	2016-12-01	2017-02-01	87
2	2016-12-01	2017-01-24	87
14	2016-12-01	2017-03-07	30
15	2016-12-01	2017-02-22	30

**2. Which months are available to calculate churn rates in the data?**

## 2.1 Available Months for Calculations

A query was performed to determine the months available in our dataset to calculate the churn rates.

- The earliest date a subscription was started was December 1 and the latest date a subscription was canceled was March 31
- Given that Codeflix requires minimum subscription length of 1 month, as the dataset supports, the months we were able to calculate churn rates for were **January, February, and March**

```
-- Check which months to calculate churn rate
SELECT MIN(subscription_start) as
       earliest_start_date,
       MAX(subscription_start) as
       latest_start_date,
       MIN(subscription_end) as
       earliest_cancel_date,
       MAX(subscription_end) as
       latest_cancel_date
FROM subscriptions;
```

earliest_start_date	latest_start_date	earliest_cancel_date	latest_cancel_date
2016-12-01	2017-03-30	2017-01-01	2017-03-31

**3. What's the difference in churn rate between the segments of customers?**

## 3.1 Churn Rate Differences

- The churn rate in segment 30 is drastically **lower** than the churn rate in segment 87 across all three months calculated.
- The churn rate in segment 87 **increases** month to month across all three months calculated.
- There is a **significant increase** in churn rate for both segments in the month of March.

month	segment	churn_rate
2017-01-01	30	0.075601374
2017-01-01	87	0.251798561
2017-02-01	30	0.073359073
2017-02-01	87	0.320346320
2017-03-01	30	0.117318435
2017-03-01	87	0.485875706