Where are the customers?

Codeflix Churn Rates

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- On December 1st, 2016, Codeflix launched to new customers.
- 17 new subscribers signed up on that day.
- In the first month alone, 570 new subscribers joined Codeflix.
- Codeflix has been operating for 4 months, which provides us with 3 months of data regarding churn.
- During that time, 2 different segments of users have existed, segment 30 and segment 87.

MIN(subscription_start)	MAX(subscription_start)
2016-12-01	2017-03-30

launch_date_subscribers
17

december_2016_subscribers
570

```
SELECT MIN(subscription_start),
       MAX(subscription_start)
FROM subscriptions;
```

```
SELECT COUNT(*) as launch_date_subscribers
FROM subscriptions
WHERE subscription_start = '2016-12-01';
```

```
SELECT COUNT(*) as december_2016_subscribers
FROM subscriptions
WHERE subscription_start BETWEEN '2016-12-01' AND
'2016-12-31';
```

2. Where are the customers?

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- Since launching to subscribers, there have been 2000 new subscribers..
- Of those new subscribers, 620 have cancelled their membership.
- As of 31 March 2017, there are 1380 current subscribers.
- The company as a whole experienced moderate churn, with a significant increase in the month of March.

new_subscribers
2000
cancellations
620
current_subscribers
1380

month	churn_rate
Jan 2017	16.16%
Feb 2017	18.98%
Mar 2017	27.43%

3. What is working?

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- Based on the data for the first 3 months of 2017, segment 30 is far outpacing segment 87 in customer retention.
- With that in mind, segment 87 needs to be evaluated and compared to segment 30 to see if a cause can be determined as to why segment 30 is retaining customers compared to segment 80.

month	segment	churn_rate
Jan 2017	30	7.56%
Feb 2017	30	7.33%
Mar 2017	30	11.73%
Jan 2017	87	25.17%
Feb 2017	87	32.03%
Mar 2017	87	48.58%

3. What is working? SQL Code

```
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,
  segment,
```

```
  CASE
       WHEN (subscription_start < first_day)
       AND (subscription_end >first_day
        OR subscription_end IS NULL
        ) THEN 1
       ELSE 0
   END as is_active,
  CASE
    WHEN (subscription_end BETWEEN first_day AND last_day)
THEN 1
    ELSE 0
    END AS is_canceled
       FROM cross_join
   ),
status_aggregate AS (
  SELECT month,
       segment,
       SUM(is_active) AS sum_active,
    SUM(is_canceled) AS sum_canceled
  FROM status
  GROUP BY month, segment
)
SELECT
  month,
  segment,
  1.0 * sum_canceled/sum_active AS churn_rate
FROM status_aggregate
ORDER BY segment ASC;
```