

# Learn SQL from Scratch

Emily Dammer

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Get Familiar with  
CoolTShirts

# Get Familiar with CoolTShirts

1. How many campaigns and sources does CoolTShirts use and how are they related? Be sure to explain the difference between `utm_campaign` and `utm_source`.
  - a. There are eight `utm_campaign` sites.
  - b. There are six `utm_source` sites.
  - c. `Utm_campaign` was the ad that the user clicked to follow to purchase an item, while `Utm_source` is the site where the user clicked to follow the ad campaign.
2. What pages are on their website?
  - a. Nytimes
  - b. Facebook
  - c. Google
  - d. Medium
  - e. Buzzfeed
  - f. Email

```
SELECT COUNT(DISTINCT  
utm_campaign)  
FROM page_visits;
```

```
SELECT COUNT(DISTINCT  
utm_source)  
FROM page_visits;
```

```
SELECT DISTINCT  
utm_campaign,utm_source  
FROM page_visits;
```

What is the User Journey

# What is the User's Journey

How many first touches is each campaign responsible for?

- Cool-tshirts-search = 169
- Getting-to-know-cool-t-shirts = 612
- interview-with -cool-tshirts-facts = 622
- Ten-crazy-cool-tshirts-facts = 576

```
WITH first_touch AS (  
  SELECT user_id,  
         MIN(timestamp) as first_touch_at  
  FROM page_visits  
  GROUP BY user_id)  
SELECT pv.utm_campaign,  
       COUNT(ft.first_touch_at)  
  FROM first_touch ft  
  JOIN page_visits pv  
    ON ft.user_id = pv.user_id  
   AND ft.first_touch_at = pv.timestamp  
  GROUP BY pv.utm_campaign;
```

# What is the User's Journey

How many last touches is each campaign responsible for?

- Cool-tshirts-search = 60
- Getting-to-know-cool-tshirts = 232
- Interview-with-cool-tshirts-founder = 184
- Paid-search = 178
- Retargeting-ad = 443
- Retargeting-campaign = 245
- Ten-crazy-cool-tshirts-facts = 190
- Weekly-newsletter = 447

```
WITH last_touch AS (  
  SELECT user_id,  
         MAX(timestamp) as last_touch_at  
  FROM page_visits  
  GROUP BY user_id)  
SELECT pv.utm_campaign,  
       COUNT(ft.last_touch_at)  
  FROM last_touch ft  
  JOIN page_visits pv  
    ON ft.user_id = pv.user_id  
   AND ft.last_touch_at = pv.timestamp  
 GROUP BY pv.utm_campaign;
```

# What is the User's Journey

How many visitors make a purchase?

- 361 visitors make a purchase.

How many last touches *on the purchase page* is each campaign responsible for?

- Cool-tshirts-search = 2
- Getting-to-know-cool-tshirts = 9
- Interview-with-cool-tshirts-founder = 7
- Paid-search = 52
- Retargeting-ad = 113
- Retargeting-campaign = 54
- Ten-crazy-cool-tshirts-facts = 9
- Weekly-newsletter = 115

```
SELECT COUNT (DISTINCT user_id)
FROM page_visits
WHERE page_name = '4 - purchase';
```

```
WITH last_touch AS (
SELECT user_id,
MAX(timestamp) as last_touch_at
FROM page_visits
WHERE page_name = '4 - purchase'
GROUP BY user_id)
SELECT pv.utm_campaign,
COUNT(ft.last_touch_at)
FROM last_touch ft
JOIN page_visits pv
ON ft.user_id = pv.user_id
AND ft.last_touch_at = pv.timestamp
GROUP BY pv.utm_campaign;
```



# What is the User's Journey?

622 users out of 1,979 selected the interview-with -cool-tshirts-facts campaign without going on to purchase anything, the largest number of users. The second largest number was 612 users for Getting-to-know-cool-t-shirts campaign; however, no users went on to the purchase page at this point.

447 users out of 1,979 selected the weekly-newsletter campaign before then going on to the purchase page; the largest number of users. The second largest number was 443 for the retargeting-ad campaign; however, out of the 1,979 total number of user, it was determined that only 361 visitors out of the total made a purchase.

Only 115 users who made a purchase had selected the weekly-newsletter campaign and 113 had select the retargeting-ad. Although these two campaigns seemed to attract the most users to finally purchase product.

Optimize the Campaign Journey

# Optimize the Journey

1. Because the weekly-ad and retargeting-ad campaigns had the most users purchase a product on the purchase page, I would recommend promoting those two campaigns as much as possible.
2. Getting-to-know-cool-tshirts was also relatively high in the first and last touch attribution queries, so I would recommend promoting that campaign as well as it seems to push the user toward the last touch attribution.
3. And if possible, I would try to see if I can get users to select the weekly-ad and retargeting-ad campaigns as both first and last touch attributes as they were the most popular campaigns overall.