



First and Last Touch  
Learn SQL from Scratch  
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## Question 1

```
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;
```

The first two queries left us with eight distinct UTM campaigns and six distinct UTM Sources. The last query results are in the columns to the right. From this info, we can glean that interested shoppers in t-shirts In general, did some searching with a search engine (google) which Could have led them to certain websites (nytimes, buzzfeed, medium) And those websites left cookies which could have led to the Retargetting through facebook, or emails.

utm_campaign	utm_sources
Getting-to-know-cool-tshirts	nytimes
Weekly-newsletter	email
Ten-crazy-cool-tshirt-facts	buzzfeed
Retargetting-campaign	email
Retargetting-ad	facebook
Interview-with-cool-tshirts-founder	medium
Paid-search	google
Cool-tshirts-search	google

## Question 2

This simple query (to the right) showed us the titles of of each section Of the pages that were visited. There are four unique titles shown below.

Page_name	n/a	n/a
1 - landing_page		
2 - shopping_cart		
3 - checkout		
4 - purchase		

```
select distinct page_name
from page_visits;
```

## Question 3

This more complex query showed us how many first touches each Campaign was responsible for. We can see that the 'interview-with-Cool-tshirts-founder' was the highest with 622 and cool-tshirts-search yielded the least with 169.

Ft_attr.utm_source	Ft_attr.utm_campaign	Count(*)
buzzfeed	Ten-crazy-cool-tshirts-facts	576
google	Cool-tshirts-search	169
medium	interview-with-cool-thsirts-founder	622
nytimes	Getting-to-know-cool-tshirts	612

```
WITH last_touch AS (  
  SELECT user_id,  
         MAX(timestamp) as last_touch_at  
  FROM page_visits  
  GROUP BY user_id),  
lt_attr as (  
  SELECT lt.user_id,  
         lt.last_touch_at,  
         pv.utm_source,  
         pv.utm_campaign,  
         pv.page_name  
  FROM last_touch lt  
  JOIN page_visits pv  
    ON lt.user_id = pv.user_id  
   AND lt.last_touch_at = pv.timestamp)  
select lt_attr.utm_campaign,  
       COUNT(*)  
from lt_attr  
group by 1;
```

## Question 4

```
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),  
lt_attr as (  
  SELECT lt.user_id,  
         lt.last_touch_at,  
         pv.utm_source,  
         pv.utm_campaign,  
         pv.page_name  
  FROM last_touch lt  
  JOIN page_visits pv  
    ON lt.user_id = pv.user_id  
    AND lt.last_touch_at = pv.timestamp)  
select lt_attr.utm_campaign,  
       COUNT(*)  
from lt_attr  
group by 1  
order by 2;
```

Lt_attr.utm_campaign	Count(*)
Cool-tshirts-search	2
Interview-with-cool-tshirts-founder	7
Getting-to-know-cool-tshirts	9
Ten-crazy-cool-tshirts-facts	9
Paid-search	52
Retargetting-campaign	54
Retargetting-ad	113
Weekly-newsletter	115

# Question 5

This simple query (to the right) showed us how many unique visitors Made a purchase.

```
select count(distinct user_id)
from page_visits
where page_name = '4 - purchase';
```

Count(distinct user_id)	n/a	n/a
361		