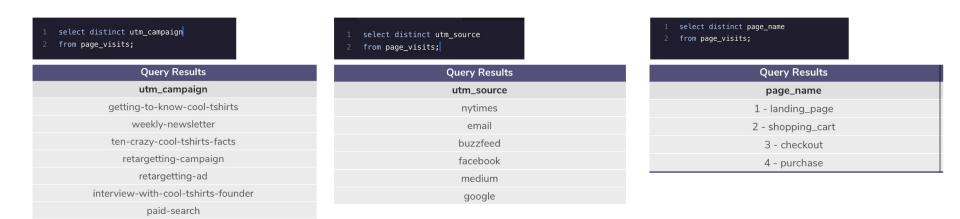# Final Capstone Project Attribution Queries

Learn SQL from Scratch
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1. Get familiar with the company.

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. What pages are on their website?

```
1   select distinct utm_campaign
2   from page_visits;
```

Query Results
utm_campaign
getting-to-know-cool-tshirts
weekly-newsletter
ten-crazy-cool-tshirts-facts
retargetting-campaign
retargetting-ad
interview-with-cool-tshirts-founder
paid-search
cool-tshirts-search

```
1   select distinct utm_source
2   from page_visits;
```

Query Results
utm_source
nytimes
email
buzzfeed
facebook
medium
google

```
1   select distinct page_name
2   from page_visits;
```

Query Results
page_name
1 - landing_page
2 - shopping_cart
3 - checkout
4 - purchase

Difference:
Campaign is an event happens on a certain period of time. One campaign can use multiple sources
Source is the channel where the event can use. One source can be used by multiple campaigns

2. What is the user journey?

How many first touches is each campaign responsible for?

Query Results	
ft_attr.utm_campaign	**count(*)**
cool-tshirts-search	169
ten-crazy-cool-tshirts-facts	576
getting-to-know-cool-tshirts	612
interview-with-cool-tshirts-founder	622

How many last touches is each campaign responsible for?

Query Results	
lt_attr.utm_campaign	**COUNT(*)**
weekly-newsletter	447
retargetting-ad	443
retargetting-campaign	245
getting-to-know-cool-tshirts	232
ten-crazy-cool-tshirts-facts	190
interview-with-cool-tshirts-founder	184
paid-search	178
cool-tshirts-search	60

2. What is the user journey?

How many visitors make a purchase?

Query Results
count (distinct user_id)
361

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

Query Results	
lt_attr.utm_campaign	**COUNT(*)**
weekly-newsletter	115
retargetting-ad	113
retargetting-campaign	54
paid-search	52
getting-to-know-cool-tshirts	9
ten-crazy-cool-tshirts-facts	9
interview-with-cool-tshirts-founder	7
cool-tshirts-search	2

What is the typical user journey?

1. User accesses because of his/her interest in t-shirt content/information
   - the two campaigns brought the most user first touch are information sharing about t-shirt
2. User did not buy in his/her first access but left contact information and return later
   - the two campaigns that brought the most last touch users are newsletter and re-targeting
3. Most of the purchase are contributed by those return-customer instead of first touch customers
   - newsletter and retargeting campaigns contributed the most purchases

3. Optimize the campaign budget

CoolTShirts can re-invest in 5 campaigns. Which should they pick and why?

1. Interview with cool t-shirt founder
2. Getting to know cool t-shirts
3. Ten crazy cool t-shirt facts
4. Weekly Newsletter
5. Retargeting ad

They should pick above campaigns because they contribute to the most of first touch, last touch, and purchase.