



CoolTShirts.com

Learn SQL from Scratch

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Jan 20, 2019

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1. Get familiar with CoolTShirts

1.1 How many campaigns and sources does CoolTShirts use? Which source is used for each campaign?

- 8 Campaigns
- 6 Sources
- Table below shows how Campaigns and Sources are related

UTM_Campaign	UTM_Source
getting-to-know-cool-tshirts	nytimes
weekly-newsletter	email
ten-crazy-cool-tshirts-facts	buzzfeed
retargetting-campaign	email
retargetting-ad	facebook
interview-with-cool-tshirts-founder	medium
paid-search	google
cool-tshirts-search	google

```
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;
```

1.2 What pages are on the CoolTShirts website?

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

```
SELECT DISTINCT page_name  
FROM page_visits;
```

2. What is the User's journey?

2.1 How many first touches is each campaign responsible for?

user_id	first_touch_at	utm_source	utm_campaign	count(utm_campaign)
99990	2018-01-13 23:30:09	medium	interview-with-cool-tshirts-founder	622
99933	2018-01-25 00:04:39	nytimes	getting-to-know-cool-tshirts	612
99765	2018-01-04 05:59:46	buzzfeed	ten-crazy-cool-tshirts-facts	576
99684	2018-01-13 13:20:49	google	cool-tshirts-search	169

```
WITH first_touch AS (  
  SELECT user_id, MIN(timestamp) AS  
    first_touch_at  
  FROM page_visits  
  GROUP BY user_id)  
  
SELECT ft.user_id, ft.first_touch_at,  
  pv.utm_source, pv.utm_campaign,  
  COUNT(utm_campaign)  
FROM first_touch ft  
JOIN page_visits pv  
ON ft.user_id = pv.user_id  
AND ft.first_touch_at = pv.timestamp  
GROUP BY utm_campaign  
ORDER BY 5 desc;
```

2.2 How many last touches is each campaign responsible for?

user_id	last_touch_at	utm_source	utm_campaign	count(utm_campaign)
99933	2018-01-26 06:18:39	email	weekly-newsletter	447
99928	2018-01-24 05:26:09	facebook	retargetting-ad	443
99990	2018-01-16 11:35:09	email	retargetting-campaign	245
99589	2018-01-15 04:55:43	nytimes	getting-to-know-cool-tshirts	232
99765	2018-01-04 05:59:47	buzzfeed	ten-crazy-cool-tshirts-facts	190
99838	2018-01-02 07:40:34	medium	interview-with-cool-tshirts-founder	184
98840	2018-01-10 04:58:48	google	paid-search	178
99344	2018-01-18 21:36:32	google	cool-tshirts-search	60

```
WITH last_touch AS (  
  SELECT user_id, MAX(timestamp) AS  
    last_touch_at  
  FROM page_visits  
  GROUP BY user_id)  
  
SELECT lt.user_id, lt.last_touch_at,  
  pv.utm_source, pv.utm_campaign,  
  COUNT(utm_campaign)  
FROM last_touch lt  
JOIN page_visits pv  
  ON lt.user_id = pv.user_id  
  AND lt.last_touch_at = pv.timestamp  
GROUP BY utm_campaign  
ORDER BY 5 DESC;
```


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

user_id	last_touch_at	utm_source	utm_campaign	count(utm_campaign)
99933	2018-01-26 06:18:39	email	weekly-newsletter	115
99897	2018-01-06 09:41:19	facebook	retargetting-ad	113
99285	2018-01-24 09:00:58	email	retargetting-campaign	54
94567	2018-01-19 16:37:58	google	paid-search	52
92172	2018-01-16 15:15:29	nytimes	getting-to-know-cool-tshirts	9
98651	2018-01-15 04:17:36	buzzfeed	ten-crazy-cool-tshirts-facts	9
83547	2018-01-10 18:20:21	medium	interview-with-cool-tshirts-founder	7
95650	2018-01-18 00:25:00	google	cool-tshirts-search	2

```
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 lt.user_id, lt.last_touch_at,  
  pv.utm_source, pv.utm_campaign,  
  COUNT(utm_campaign)  
FROM last_touch lt  
JOIN page_visits pv  
  ON lt.user_id = pv.user_id  
  AND lt.last_touch_at = pv.timestamp  
GROUP BY utm_campaign  
ORDER BY 5 DESC;
```

2.4 How many visitors make a purchase?

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

THANK YOU!