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

Use three queries:

* one for the number of distinct campaigns,
* one for the number of distinct sources,
* one to find how they are related.

SELECT COUNT(DISTINCT utm\_campaign) AS distinct\_campaigns

FROM page\_visits;

SELECT COUNT (DISTINCT utm\_source) AS distinct\_sources

FROM page\_visits;

SELECT DISTINCT utm\_campaign, utm\_source

FROM page\_visits;

|  |
| --- |
| **distinct\_campaigns** |
| 8 |
| **distinct\_sources** |
| 6 |
| **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 |

1. What pages are on the CoolTShirts website? Find the distinct values of the page\_name column.

SELECT DISTINCT page\_name

FROM page\_visits;

|  |
| --- |
| **page\_name** |
| 1 - landing\_page |
| 2 - shopping\_cart |
| 3 - checkout |
| 1. - purchase |

1. How many first touches is each campaign responsible for?

WITH first\_touch AS (

  SELECT user\_id,

      MIN(timestamp) AS 'first\_touch\_at'

  FROM page\_visits

  GROUP BY user\_id),

ft\_attr AS (SELECT ft.user\_id,

  ft.first\_touch\_at,

  pv.utm\_source,

  pv.utm\_campaign

FROM first\_touch AS 'ft'

JOIN page\_visits AS 'pv'

  ON ft.user\_id = pv.user\_id

  AND ft.first\_touch\_at = pv.timestamp)

SELECT ft\_attr.utm\_source,

  ft\_attr.utm\_campaign,

  COUNT(\*)

FROM ft\_attr

GROUP BY 1, 2

ORDER BY 3 DESC;

|  |  |  |
| --- | --- | --- |
| **utm\_source** | **utm\_campaign** | **COUNT(\*)** |
| medium | interview-with-cool-tshirts-founder | 622 |
| nytimes | getting-to-know-cool-tshirts | 612 |
| buzzfeed | ten-crazy-cool-tshirts-facts | 576 |
| google | cool-tshirts-search | 169 |

1. How many last touches is each campaign responsible for?

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

FROM last\_touch AS 'lt'

JOIN page\_visits AS 'pv'

  ON lt.user\_id = pv.user\_id

  AND lt.last\_touch\_at = pv.timestamp)

SELECT lt\_attr.utm\_source,

  lt\_attr.utm\_campaign,

  COUNT(\*)

FROM lt\_attr

GROUP BY 1, 2

ORDER BY 3 DESC;

|  |  |  |
| --- | --- | --- |
| **utm\_source** | **utm\_campaign** | **COUNT(\*)** |
| email | weekly-newsletter | 447 |
| facebook | retargetting-ad | 443 |
| email | retargetting-campaign | 245 |
| nytimes | getting-to-know-cool-tshirts | 232 |
| buzzfeed | ten-crazy-cool-tshirts-facts | 190 |
| medium | interview-with-cool-tshirts-founder | 184 |
| google | paid-search | 178 |
| google | cool-tshirts-search | 60 |

1. How many visitors make a purchase? Count the distinct users who visited the page named 4 - purchase.

SELECT COUNT(user\_id)

FROM page\_visits

WHERE page\_name = '4 - purchase';

|  |
| --- |
| **COUNT(user\_id)** |
| 361 |

6. How many last touches *on the purchase page* is each campaign responsible for? This query will look similar to your last-touch query, but with an additional WHERE clause.

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(\*) AS 'visitors\_purchase'

FROM last\_touch AS 'lt'

JOIN page\_visits AS 'pv'

  ON lt.user\_id = pv.user\_id

  AND lt.last\_touch\_at = pv.timestamp

GROUP BY utm\_campaign;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **user\_id** | **last\_touch\_at** | **utm\_source** | **utm\_campaign** | **visitors\_purchase** |
| 48931 | 2018-01-17 10:39:53 | google | cool-tshirts-search | 2 |
| 26835 | 2018-01-07 02:12:04 | nytimes | getting-to-know-cool-tshirts | 9 |
| 14770 | 2018-01-15 22:54:18 | medium | interview-with-cool-tshirts-founder | 7 |
| 10354 | 2018-01-22 02:00:29 | google | paid-search | 52 |
| 10069 | 2018-01-04 08:13:01 | facebook | retargetting-ad | 113 |
| 10030 | 2018-01-28 13:38:02 | email | retargetting-campaign | 54 |
| 22224 | 2018-01-26 06:30:52 | buzzfeed | ten-crazy-cool-tshirts-facts | 9 |
| 10162 | 2018-02-01 04:26:10 | email | weekly-newsletter | 115 |

7. CoolTShirts can re-invest in 5 campaigns. Given your findings in the project, which should they pick and why?