**SQL Code**

SELECT COUNT (DISTINCT utm\_campaign)

1

FROM page\_visits;

SELECT COUNT (DISTINCT utm\_source)

FROM page\_visits;

SELECT DISTINCT utm\_campaign, utm\_source

FROM page\_visits;

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SELECT DISTINCT page\_name

2

FROM page\_visits;

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

WITH first\_touch AS (

SELECT user\_id,

MIN(timestamp) as first\_touch\_at

FROM page\_visits

3

GROUP BY user\_id),

ft\_attr AS (

SELECT ft.user\_id,

ft.first\_touch\_at,

pv.utm\_source,

pv.utm\_campaign

FROM first\_touch ft

JOIN page\_visits 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;

WITH last\_touch AS (

SELECT user\_id,

MAX(timestamp) as last\_touch\_at

FROM page\_visits

GROUP BY user\_id),

4

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\_source,

lt\_attr.utm\_campaign,

COUNT(\*)

FROM lt\_attr

GROUP BY 1, 2

ORDER BY 3 DESC;

WITH last\_touch AS (

SELECT user\_id,

MAX(timestamp) AS last\_touch\_at

FROM page\_visits

5

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 laszt\_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;