26_App Click-through Rate (CTR) Easy - Solution

Source - https://datalemur.com/questions/click-through-rate

Running Notes

- Write a query to calculate the click-through rate (CTR) for the app in 2022 and round the results to 2 decimal places.

```
SELECT * FROM events
WHERE timestamp BETWEEN '2022-01-01' AND '2022-12-31'  -- fo
```

- Percentage of click-through rate (CTR) = 100.0 * Number of clicks / Number of impressions

```
SELECT app_id,
ROUND(100.0 * COUNT( CASE
WHEN event_type='click' THEN 1
END) / COUNT( CASE
WHEN event_type='impression' THEN 1
END),2) AS ctr
FROM events
WHERE timestamp BETWEEN '2022-01-01' AND '2022-12-31'
GROUP BY app_id;
```

- The query counts rows where `event_type = 'click'` and separately counts rows where `event_type = 'impression'` using `CASE` .
  - `COUNT(CASE WHEN ... THEN 1 END)` evaluates the condition and counts non-null results.
- Uses `BETWEEN` to filter timestamps from `2022-01-01` to `2022-12-31` (inclusive).