**OPERATIONAL ANALYTICS AND INVESTIGATING METRIC SPIKE**

***PROJECT DESCRIPTION:***

This project is related to operational analytics which helps understanding and explaining sudden changes in key metrics, such as a dip in daily user engagement or a drop in sales. As a Data Analyst, we will come across such tasks regularly. It's about understanding user behaviour over time, spotting trends, and making data-driven decisions to enhance the overall user experience.

The methodology involves employing SQL queries on a MySQL Workbench database. Each query is carefully designed to extract specific information relevant to the management's inquiries. The focus is on crafting clean, optimized queries to ensure efficiency in data retrieval.

***APPROACH:***

In executing the project, a meticulous and systematic approach was adopted, ensuring clarity

in understanding each query posed by the management. The process involved the following

key steps:

1.Formulation of Entity Relationship Diagram

2. Step by step breakdown of the problem

3. Formulation of query step by step

Key Benefits of the Approach:

1. Clarity in Understanding

2. Precise Query Interpretation

3. Optimized Data Retrieval

4. Insightful Analysis

5. Alignment with Objectives

***TECH STACK USED:***

MySQL Workbench was used to carry out the operations. It is an open-source RDBMS.

***INSIGHTS:***

**Case Study 1**

**Jobs Reviewed Over Time:**

This could indicate peak hiring seasons, or cyclical patterns in job availability. Are there periods of high or low activity?

**Throughput Analysis:**

How quickly are jobs being reviewed and processed? A high throughput suggests a streamlined and efficient workflow, while low throughput may indicate bottlenecks or resource constraints.

It is better to take 7 days rolling average than the daily metric as throughput can vary significantly from day to day due to various factors like workload peaks, project deadlines, or external influences. A 7-day average helps smooth out these daily fluctuations, providing a more stable and representative measure of overall throughput.

**Language Share Analysis:**

The analysis provides insights into the linguistic preferences or requirements within the job market. This can be crucial for individuals seeking employment in a particular location or industry where knowledge of a specific language is essential.

**Duplicate Rows Detection:**

Identifying duplicate rows in a dataset is essential for maintaining data integrity and ensuring accurate analyses.

**Case Study 2**

**Weekly User Engagement:**

Identify peak engagement times during the week. This can help optimize content delivery or product updates to coincide with periods of high user activity. Detection of any shifts or trends in user behaviour on a weekly basis.

**User Growth Analysis:**

Understand the pace at which new users are joining. This insight is crucial for assessing the effectiveness of marketing strategies or user acquisition efforts.

**Weekly Retention Analysis:**

To evaluate how well your platform retains users from week to week. High retention rates indicate user satisfaction and engagement. Identification of weeks where there is a significant drop in user engagement could signal potential issues or dissatisfaction that needs to be addressed.

**Weekly Engagement Per Device:**

Understanding of devices (desktop, mobile, tablet) which users prefer during different days of the week. This can guide the optimization of the user interface for specific devices on certain days.

**Email Engagement Analysis:**

Open and click rates can indicate the weekly performance of email campaigns. It can also help in identification of the types of emails which resonate most with users on specific days.

***RESULTS****:*

CASE STUDY 1

**#Jobs reviewed per hour for each day in November, 2020**

SELECT

ds,

ROUND((COUNT(job\_id) / SUM(time\_spent)) \* 60 \* 60,

2) AS TOTAL\_TIME\_EACH\_DAY

FROM

job\_data

GROUP BY ds

ORDER BY ds

;

Result Set

|  |  |
| --- | --- |
| **ds** | **TOTAL\_TIME\_EACH\_DAY** |
| 01/11/20 | 61.28 |
| 04/11/20 | 51.8 |
| 05/11/20 | 57.14 |
| 06/11/20 | 48.65 |
| 09/11/20 | 63.53 |
| 10/11/20 | 42.86 |
| 12/11/20 | 90 |
| 16/11/20 | 87.8 |
| 17/11/20 | 48.32 |
| 18/11/20 | 65.45 |
| 19/11/20 | 61.54 |
| 20/11/20 | 55.38 |
| 21/11/20 | 50.35 |
| 23/11/20 | 34.29 |
| 24/11/20 | 38.92 |
| 25/11/20 | 46.45 |
| 26/11/20 | 58.38 |
| 27/11/20 | 35.29 |
| 28/11/20 | 218.18 |
| 29/11/20 | 166.15 |
| 30/11/20 | 92.31 |

**#THROUGHPUT ANALYSIS**

**#7-day rolling average of throughput (number of events per second)**

WITH AVG\_EVENTS AS

(SELECT ds, COUNT(`event`)/SUM(time\_spent) AS per\_sec\_event

FROM job\_data

GROUP BY ds)

SELECT ds, ROUND(AVG(per\_sec\_event)OVER( ROWS BETWEEN 6 preceding AND current ROW),2)

AS Rolling\_AVG\_7\_days

FROM AVG\_EVENTS;

**Result set**

|  |  |
| --- | --- |
| ds | Rolling\_AVG\_7\_days |
| 30/11/20 | 0.03 |
| 29/11/20 | 0.04 |
| 28/11/20 | 0.04 |
| 27/11/20 | 0.04 |
| 26/11/20 | 0.03 |
| 25/11/20 | 0.03 |
| 24/11/20 | 0.02 |
| 23/11/20 | 0.02 |
| 21/11/20 | 0.02 |
| 20/11/20 | 0.02 |
| 19/11/20 | 0.01 |
| 18/11/20 | 0.02 |
| 17/11/20 | 0.02 |
| 16/11/20 | 0.02 |
| 12/11/20 | 0.02 |
| 10/11/20 | 0.02 |
| 09/11/20 | 0.03 |
| 06/11/20 | 0.02 |
| 05/11/20 | 0.02 |
| 04/11/20 | 0.02 |
| 01/11/20 | 0.03 |

**#Language Share Analysis**

WITH t AS(

SELECT COUNT(\*) AS Total\_records

FROM job\_data)

SELECT language, ROUND((COUNT(language)\*100)/ Total\_records, 2)

AS Language\_Share

FROM t, job\_data

GROUP by Language, total\_records;

**Result Set**

|  |  |
| --- | --- |
| language | Language\_Share |
| Arabic | 15.69 |
| English | 15.69 |
| French | 13.73 |
| Hindi | 13.73 |
| Italian | 11.76 |
| Persian | 29.41 |

SELECT

language,

ROUND((COUNT(language) \* 100) / (SELECT

COUNT(\*)

FROM

job\_data),

2) AS Langauge\_share

FROM

job\_data

GROUP BY language;

**Result Set**

|  |  |
| --- | --- |
| language | Language\_Share |
| English | 15.69 |
| Arabic | 15.69 |
| Persian | 29.41 |
| Hindi | 13.73 |
| French | 13.73 |
| Italian | 11.76 |

**#Duplicate Rows Detection**

SELECT

ds,

job\_id,

actor\_id,

`event`,

`language`,

time\_spent,

org,

COUNT(1)

FROM

job\_data

GROUP BY ds , job\_id , actor\_id , `event` , `language` , time\_spent , org

HAVING COUNT(1) > 1;

**Result Set**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ds | job\_id | actor\_id | event | language | time\_spent | org | COUNT(1) |
| 21/11/20 | 31 | 1020 | transfer | English | 79 | C | 2 |
| 17/11/20 | 22 | 1055 | decision | Arabic | 77 | C | 2 |

**CASE STUDY 2**

**#Weekly User Engagement**

SELECT

COUNT(user\_id) AS `User Engagement`,

EXTRACT(WEEK FROM occurred\_at) AS WEEK

FROM

events

WHERE

event\_type = 'engagement'

GROUP BY WEEK

ORDER BY WEEK;

**Result Set**

|  |  |
| --- | --- |
| User Engagement | WEEK |
| 8019 | 17 |
| 17341 | 18 |
| 17224 | 19 |
| 17911 | 20 |
| 17151 | 21 |
| 18413 | 22 |
| 18280 | 23 |
| 19052 | 24 |
| 18642 | 25 |
| 19061 | 26 |
| 19881 | 27 |
| 20776 | 28 |
| 20067 | 29 |
| 21533 | 30 |
| 18556 | 31 |
| 16612 | 32 |
| 16145 | 33 |
| 16127 | 34 |
| 784 | 35 |

SELECT

user\_id,

COUNT(user\_id) `User Engagement`,

EXTRACT(WEEK FROM occurred\_at) AS WEEK

FROM

events

WHERE

event\_type = 'engagement'

GROUP BY WEEK , user\_id

ORDER BY WEEK;

**Result Set**

|  |  |  |
| --- | --- | --- |
| user\_id | User Engagement | WEEK |
| 8 | 2 | 17 |
| 22 | 8 | 17 |
| 66 | 14 | 17 |
| 163 | 22 | 17 |
| 172 | 15 | 17 |
| 209 | 9 | 17 |
| 232 | 39 | 17 |
| 239 | 9 | 17 |
| 253 | 18 | 17 |
| 287 | 16 | 17 |
| 319 | 10 | 17 |
| 365 | 7 | 17 |
| 373 | 8 | 17 |
| 404 | 3 | 17 |
| 434 | 5 | 17 |
| 441 | 28 | 17 |
| 492 | 19 | 17 |
| 589 | 11 | 17 |
| 591 | 13 | 17 |
| 660 | 5 | 17 |
| 688 | 8 | 17 |
| 714 | 7 | 17 |
| 729 | 50 | 17 |
| 745 | 25 | 17 |
| 746 | 5 | 17 |
| 822 | 4 | 17 |
| 836 | 3 | 17 |
| 857 | 47 | 17 |
| 864 | 3 | 17 |
| 914 | 45 | 17 |
| 915 | 13 | 17 |
| 916 | 5 | 17 |
| 973 | 12 | 17 |
| 984 | 3 | 17 |
| 1012 | 10 | 17 |
| 1114 | 17 | 17 |
| 1128 | 7 | 17 |
| 1147 | 18 | 17 |
| 1154 | 17 | 17 |
| 1165 | 7 | 17 |
| 1260 | 3 | 17 |
| 1287 | 7 | 17 |
| 1295 | 8 | 17 |
| 1297 | 25 | 17 |
| 1346 | 4 | 17 |
| 1367 | 20 | 17 |
| 1381 | 17 | 17 |
| 1384 | 6 | 17 |
| 1412 | 70 | 17 |
| 1428 | 13 | 17 |
| 1439 | 27 | 17 |
| 1509 | 22 | 17 |
| 1554 | 15 | 17 |
| 1570 | 12 | 17 |
| 1591 | 6 | 17 |
| 1605 | 21 | 17 |
| 1611 | 30 | 17 |
| 1619 | 27 | 17 |
| 1635 | 31 | 17 |
| 1650 | 12 | 17 |
| 1695 | 6 | 17 |
| 1737 | 40 | 17 |
| 1761 | 7 | 17 |
| 1811 | 17 | 17 |
| 1895 | 21 | 17 |
| 1927 | 24 | 17 |
| 1979 | 10 | 17 |
| 1997 | 3 | 17 |
| 2026 | 14 | 17 |
| 2070 | 7 | 17 |
| 2079 | 57 | 17 |
| 2111 | 16 | 17 |
| 2123 | 36 | 17 |
| 2125 | 29 | 17 |
| 2138 | 13 | 17 |
| 2172 | 11 | 17 |
| 2176 | 10 | 17 |
| 2250 | 16 | 17 |
| 2265 | 5 | 17 |
| 2279 | 26 | 17 |
| 2329 | 7 | 17 |
| 2360 | 10 | 17 |
| 2372 | 5 | 17 |
| 2373 | 3 | 17 |
| 2376 | 15 | 17 |
| 2451 | 15 | 17 |
| 2513 | 35 | 17 |
| 2528 | 46 | 17 |
| 2661 | 11 | 17 |
| 2706 | 3 | 17 |
| 2707 | 10 | 17 |
| 2761 | 9 | 17 |
| 2787 | 3 | 17 |
| 2799 | 2 | 17 |
| 2814 | 10 | 17 |
| 2843 | 28 | 17 |
| 2844 | 34 | 17 |
| 2853 | 10 | 17 |
| 2872 | 6 | 17 |
| 2931 | 7 | 17 |
| 2935 | 5 | 17 |
| 2940 | 7 | 17 |
| 2959 | 24 | 17 |
| 2968 | 7 | 17 |
| 2990 | 6 | 17 |
| 3025 | 31 | 17 |
| 3039 | 10 | 17 |
| 3051 | 9 | 17 |
| 3065 | 3 | 17 |
| 3081 | 9 | 17 |
| 3100 | 30 | 17 |
| 3102 | 5 | 17 |
| 3103 | 18 | 17 |
| 3146 | 5 | 17 |
| 3163 | 17 | 17 |
| 3176 | 17 | 17 |
| 3194 | 7 | 17 |
| 3200 | 7 | 17 |
| 3243 | 3 | 17 |
| 3245 | 19 | 17 |
| 3255 | 40 | 17 |
| 3275 | 9 | 17 |
| 3281 | 7 | 17 |
| 3289 | 8 | 17 |
| 3320 | 6 | 17 |
| 3325 | 47 | 17 |
| 3349 | 47 | 17 |
| 3353 | 8 | 17 |
| 3420 | 6 | 17 |
| 3446 | 25 | 17 |
| 3451 | 11 | 17 |
| 3464 | 7 | 17 |
| 3484 | 6 | 17 |
| 3495 | 15 | 17 |
| 3584 | 34 | 17 |
| 3590 | 30 | 17 |
| 3599 | 5 | 17 |
| 3633 | 58 | 17 |
| 3636 | 3 | 17 |
| 3658 | 8 | 17 |
| 3660 | 4 | 17 |
| 3760 | 4 | 17 |
| 3830 | 23 | 17 |
| 3848 | 7 | 17 |
| 3856 | 7 | 17 |
| 3882 | 8 | 17 |
| 3937 | 13 | 17 |
| 3975 | 8 | 17 |
| 3979 | 2 | 17 |
| 4052 | 2 | 17 |
| 4088 | 7 | 17 |
| 4099 | 5 | 17 |
| 4119 | 10 | 17 |
| 4140 | 19 | 17 |
| 4202 | 9 | 17 |
| 4248 | 8 | 17 |
| 4273 | 2 | 17 |
| 4281 | 17 | 17 |
| 4296 | 5 | 17 |
| 4306 | 11 | 17 |
| 4347 | 17 | 17 |
| 4353 | 6 | 17 |
| 4414 | 16 | 17 |
| 4442 | 2 | 17 |
| 4526 | 18 | 17 |
| 4535 | 5 | 17 |
| 4545 | 26 | 17 |
| 4561 | 7 | 17 |
| 4569 | 3 | 17 |
| 4584 | 7 | 17 |
| 4626 | 56 | 17 |
| 4686 | 29 | 17 |
| 4697 | 2 | 17 |
| 4805 | 4 | 17 |
| 4808 | 15 | 17 |
| 4824 | 10 | 17 |
| 4844 | 7 | 17 |
| 4934 | 17 | 17 |
| 4972 | 11 | 17 |
| 4976 | 6 | 17 |
| 4977 | 5 | 17 |
| 4988 | 4 | 17 |
| 5010 | 27 | 17 |
| 5110 | 21 | 17 |
| 5134 | 9 | 17 |
| 5156 | 61 | 17 |
| 5164 | 43 | 17 |
| 5168 | 9 | 17 |
| 5192 | 11 | 17 |
| 5217 | 30 | 17 |
| 5244 | 11 | 17 |
| 5275 | 12 | 17 |
| 5294 | 31 | 17 |
| 5299 | 30 | 17 |
| 5326 | 42 | 17 |
| 5373 | 6 | 17 |
| 5388 | 8 | 17 |
| 5394 | 13 | 17 |
| 5403 | 6 | 17 |
| 5424 | 21 | 17 |
| 5562 | 2 | 17 |
| 5563 | 2 | 17 |
| 5569 | 97 | 17 |
| 5574 | 8 | 17 |
| 5642 | 9 | 17 |
| 5677 | 12 | 17 |
| 5720 | 10 | 17 |
| 5813 | 23 | 17 |
| 5830 | 19 | 17 |
| 5888 | 16 | 17 |
| 5952 | 10 | 17 |
| 5954 | 7 | 17 |
| 5961 | 15 | 17 |
| 5981 | 11 | 17 |
| 6181 | 22 | 17 |
| 6215 | 6 | 17 |
| 6337 | 6 | 17 |
| 6349 | 30 | 17 |
| 6372 | 7 | 17 |
| 6410 | 12 | 17 |
| 6426 | 6 | 17 |
| 6435 | 28 | 17 |
| 6540 | 6 | 17 |
| 6602 | 15 | 17 |
| 6616 | 3 | 17 |
| 6625 | 8 | 17 |
| 6634 | 5 | 17 |
| 6637 | 3 | 17 |
| 6681 | 6 | 17 |
| 6739 | 19 | 17 |
| 6947 | 6 | 17 |
| 6969 | 13 | 17 |
| 7050 | 2 | 17 |
| 7110 | 26 | 17 |
| 7111 | 5 | 17 |
| 7131 | 11 | 17 |
| 7272 | 11 | 17 |
| 7300 | 3 | 17 |
| 7330 | 2 | 17 |
| 7370 | 9 | 17 |
| 7486 | 2 | 17 |
| 7492 | 8 | 17 |
| 7524 | 3 | 17 |
| 7531 | 31 | 17 |
| 7595 | 11 | 17 |
| 7603 | 19 | 17 |
| 7605 | 26 | 17 |
| 7632 | 11 | 17 |
| 7634 | 10 | 17 |
| 7655 | 5 | 17 |
| 7723 | 3 | 17 |
| 7829 | 4 | 17 |
| 7942 | 16 | 17 |
| 7946 | 4 | 17 |
| 8010 | 3 | 17 |
| 8016 | 7 | 17 |
| 8039 | 2 | 17 |
| 8041 | 5 | 17 |
| 8043 | 3 | 17 |
| 8044 | 12 | 17 |
| 8065 | 18 | 17 |
| 8091 | 2 | 17 |
| 8123 | 31 | 17 |
| 8134 | 13 | 17 |
| 8175 | 9 | 17 |
| 8183 | 7 | 17 |
| 8232 | 7 | 17 |
| 8236 | 2 | 17 |
| 8238 | 6 | 17 |
| 8253 | 12 | 17 |
| 8269 | 6 | 17 |
| 8280 | 5 | 17 |
| 8295 | 12 | 17 |
| 8305 | 17 | 17 |
| 8313 | 6 | 17 |
| 8317 | 7 | 17 |
| 8321 | 13 | 17 |
| 8342 | 11 | 17 |
| 8382 | 6 | 17 |
| 8405 | 12 | 17 |
| 8449 | 8 | 17 |
| 8454 | 45 | 17 |
| 8478 | 50 | 17 |
| 8486 | 6 | 17 |
| 8487 | 23 | 17 |
| 8532 | 15 | 17 |
| 8548 | 5 | 17 |
| 8583 | 12 | 17 |
| 8631 | 8 | 17 |
| 8644 | 3 | 17 |
| 8650 | 4 | 17 |
| 8744 | 17 | 17 |
| 8779 | 16 | 17 |
| 8787 | 2 | 17 |
| 8789 | 16 | 17 |
| 8807 | 10 | 17 |
| 8808 | 7 | 17 |
| 8829 | 7 | 17 |
| 8834 | 6 | 17 |
| 8869 | 6 | 17 |
| 8906 | 14 | 17 |
| 8938 | 19 | 17 |
| 8939 | 5 | 17 |
| 8981 | 13 | 17 |
| 9024 | 17 | 17 |
| 9025 | 7 | 17 |
| 9051 | 8 | 17 |
| 9065 | 9 | 17 |
| 9073 | 11 | 17 |
| 9136 | 25 | 17 |
| 9188 | 8 | 17 |
| 9241 | 21 | 17 |
| 9284 | 8 | 17 |
| 9287 | 11 | 17 |
| 9290 | 3 | 17 |
| 9318 | 41 | 17 |
| 9330 | 5 | 17 |
| 9350 | 5 | 17 |
| 9353 | 13 | 17 |
| 9421 | 2 | 17 |
| 9433 | 14 | 17 |
| 9468 | 6 | 17 |
| 9479 | 4 | 17 |
| 9516 | 2 | 17 |
| 9527 | 3 | 17 |
| 9567 | 4 | 17 |
| 9577 | 20 | 17 |
| 9588 | 31 | 17 |
| 9631 | 22 | 17 |
| 9640 | 21 | 17 |
| 9676 | 9 | 17 |
| 9799 | 34 | 17 |
| 9861 | 17 | 17 |
| 9874 | 4 | 17 |
| 9876 | 9 | 17 |
| 9882 | 15 | 17 |
| 9891 | 21 | 17 |
| 9899 | 2 | 17 |
| 9921 | 5 | 17 |
| 9929 | 24 | 17 |
| 9946 | 12 | 17 |
| 9954 | 8 | 17 |
| 9981 | 18 | 17 |
| 9988 | 6 | 17 |
| 9992 | 24 | 17 |
| 9997 | 7 | 17 |
| 10033 | 12 | 17 |
| 10075 | 3 | 17 |
| 10097 | 5 | 17 |
| 10099 | 7 | 17 |
| 10115 | 12 | 17 |
| 10155 | 8 | 17 |
| 10158 | 7 | 17 |
| 10166 | 9 | 17 |
| 10192 | 2 | 17 |
| 10196 | 9 | 17 |
| 10200 | 10 | 17 |
| 10223 | 11 | 17 |
| 10246 | 19 | 17 |
| 10247 | 8 | 17 |
| 10253 | 12 | 17 |
| 10254 | 6 | 17 |
| 10277 | 2 | 17 |
| 10288 | 9 | 17 |
| 10306 | 14 | 17 |
| 10309 | 13 | 17 |
| 10311 | 8 | 17 |
| 10337 | 4 | 17 |
| 10339 | 16 | 17 |
| 10343 | 6 | 17 |
| 10345 | 11 | 17 |
| 10353 | 23 | 17 |
| 10362 | 13 | 17 |
| 10383 | 24 | 17 |
| 10434 | 12 | 17 |
| 10445 | 5 | 17 |
| 10449 | 10 | 17 |
| 10457 | 9 | 17 |
| 10458 | 4 | 17 |
| 10464 | 12 | 17 |
| 10481 | 2 | 17 |
| 10493 | 13 | 17 |
| 10494 | 4 | 17 |
| 10498 | 17 | 17 |
| 10501 | 10 | 17 |
| 10504 | 5 | 17 |
| 10507 | 16 | 17 |
| 10513 | 4 | 17 |
| 10522 | 6 | 17 |
| 10523 | 11 | 17 |
| 10528 | 6 | 17 |
| 10532 | 9 | 17 |
| 10555 | 10 | 17 |
| 10562 | 3 | 17 |
| 10563 | 37 | 17 |
| 10572 | 2 | 17 |
| 10573 | 6 | 17 |
| 10576 | 24 | 17 |
| 10595 | 27 | 17 |
| 10605 | 23 | 17 |
| 10607 | 26 | 17 |
| 10612 | 12 | 17 |
| 10628 | 26 | 17 |
| 10636 | 35 | 17 |
| 10644 | 15 | 17 |
| 10650 | 4 | 17 |
| 10672 | 17 | 17 |
| 10675 | 7 | 17 |
| 10678 | 9 | 17 |
| 10683 | 7 | 17 |
| 10685 | 7 | 17 |
| 10690 | 56 | 17 |
| 10705 | 8 | 17 |
| 10712 | 11 | 17 |
| 10719 | 5 | 17 |
| 10722 | 9 | 17 |
| 10735 | 14 | 17 |
| 10788 | 17 | 17 |
| 10800 | 13 | 17 |
| 10839 | 8 | 17 |
| 10868 | 16 | 17 |
| 10883 | 7 | 17 |
| 10897 | 23 | 17 |
| 10906 | 2 | 17 |
| 10918 | 2 | 17 |
| 10924 | 11 | 17 |
| 10927 | 18 | 17 |
| 10934 | 3 | 17 |
| 10939 | 14 | 17 |
| 10947 | 18 | 17 |
| 10959 | 16 | 17 |
| 10967 | 19 | 17 |
| 10975 | 7 | 17 |
| 10982 | 7 | 17 |
| 10992 | 10 | 17 |
| 10997 | 19 | 17 |
| 11010 | 6 | 17 |
| 11020 | 5 | 17 |
| 11037 | 25 | 17 |
| 11059 | 8 | 17 |
| 11061 | 12 | 17 |
| 11066 | 21 | 17 |
| 11069 | 25 | 17 |
| 11070 | 5 | 17 |
| 11071 | 2 | 17 |
| 11073 | 2 | 17 |
| 11077 | 7 | 17 |
| 11088 | 3 | 17 |
| 11093 | 13 | 17 |
| 11095 | 38 | 17 |
| 11100 | 4 | 17 |
| 11105 | 2 | 17 |
| 11110 | 23 | 17 |
| 11114 | 13 | 17 |
| 11118 | 20 | 17 |
| 11122 | 12 | 17 |
| 11126 | 43 | 17 |
| 11127 | 3 | 17 |
| 11132 | 2 | 17 |
| 11135 | 9 | 17 |
| 11147 | 9 | 17 |
| 11152 | 5 | 17 |
| 11155 | 16 | 17 |
| 11157 | 2 | 17 |
| 11161 | 2 | 17 |
| 11163 | 4 | 17 |
| 11167 | 2 | 17 |
| 11170 | 7 | 17 |
| 11176 | 25 | 17 |
| 11181 | 3 | 17 |
| 11184 | 8 | 17 |
| 11193 | 10 | 17 |
| 11212 | 8 | 17 |
| 11213 | 12 | 17 |
| 11215 | 2 | 17 |
| 11220 | 6 | 17 |
| 11227 | 28 | 17 |
| 11233 | 7 | 17 |
| 11239 | 32 | 17 |
| 11240 | 12 | 17 |
| 11246 | 4 | 17 |
| 11261 | 6 | 17 |
| 11264 | 9 | 17 |
| 11265 | 4 | 17 |
| 11269 | 6 | 17 |
| 11270 | 25 | 17 |
| 11272 | 3 | 17 |
| 11275 | 6 | 17 |
| 11276 | 13 | 17 |
| 11279 | 17 | 17 |
| 11280 | 3 | 17 |
| 11282 | 46 | 17 |
| 11284 | 8 | 17 |
| 11285 | 8 | 17 |
| 11292 | 7 | 17 |
| 11310 | 3 | 17 |
| 11311 | 7 | 17 |
| 11314 | 11 | 17 |
| 11329 | 14 | 17 |
| 11341 | 6 | 17 |
| 11343 | 7 | 17 |
| 11352 | 13 | 17 |
| 11358 | 13 | 17 |
| 11364 | 15 | 17 |
| 11376 | 2 | 17 |
| 11386 | 11 | 17 |
| 11392 | 11 | 17 |
| 11395 | 12 | 17 |
| 11401 | 18 | 17 |
| 11406 | 30 | 17 |
| 11407 | 8 | 17 |
| 11414 | 7 | 17 |
| 11417 | 3 | 17 |
| 11421 | 40 | 17 |
| 11425 | 8 | 17 |
| 11426 | 6 | 17 |
| 11427 | 20 | 17 |
| 11442 | 18 | 17 |
| 11455 | 2 | 17 |
| 11464 | 4 | 17 |
| 11482 | 16 | 17 |
| 11484 | 3 | 17 |
| 11497 | 7 | 17 |
| 11523 | 3 | 17 |
| 11527 | 15 | 17 |
| 11530 | 5 | 17 |
| 11555 | 30 | 17 |
| 11563 | 6 | 17 |
| 11571 | 4 | 17 |
| 11573 | 12 | 17 |
| 11578 | 7 | 17 |
| 11583 | 8 | 17 |
| 11591 | 2 | 17 |
| 11592 | 5 | 17 |
| 11594 | 2 | 17 |
| 11597 | 10 | 17 |
| 11599 | 23 | 17 |
| 11600 | 3 | 17 |
| 11601 | 5 | 17 |
| 11602 | 7 | 17 |
| 11603 | 4 | 17 |
| 11606 | 19 | 17 |
| 11607 | 9 | 17 |
| 11608 | 4 | 17 |
| 11609 | 5 | 17 |
| 11610 | 22 | 17 |
| 11611 | 22 | 17 |
| 11612 | 23 | 17 |
| 11614 | 21 | 17 |
| 11615 | 2 | 17 |
| 11616 | 14 | 17 |
| 11617 | 23 | 17 |
| 11621 | 10 | 17 |
| 11622 | 21 | 17 |
| 11624 | 2 | 17 |
| 11625 | 14 | 17 |
| 11626 | 16 | 17 |
| 11632 | 4 | 17 |
| 11633 | 5 | 17 |
| 11636 | 2 | 17 |
| 11640 | 3 | 17 |
| 11641 | 8 | 17 |
| 11642 | 2 | 17 |
| 11643 | 13 | 17 |
| 11644 | 3 | 17 |
| 11647 | 5 | 17 |
| 11651 | 2 | 17 |
| 11655 | 28 | 17 |
| 11656 | 34 | 17 |
| 11657 | 16 | 17 |
| 11659 | 4 | 17 |
| 11660 | 13 | 17 |
| 11661 | 2 | 17 |
| 11665 | 10 | 17 |
| 11666 | 8 | 17 |
| 11670 | 13 | 17 |
| 11673 | 6 | 17 |
| 11675 | 2 | 17 |
| 11676 | 4 | 17 |
| 11678 | 7 | 17 |
| 11680 | 11 | 17 |
| 11684 | 6 | 17 |
| 11687 | 12 | 17 |
| 11689 | 4 | 17 |
| 11695 | 11 | 17 |
| 11698 | 3 | 17 |
| 11699 | 3 | 17 |
| 11701 | 5 | 17 |
| 11702 | 6 | 17 |
| 11750 | 11 | 17 |
| 11756 | 8 | 17 |
| 11768 | 6 | 17 |
| 11770 | 2 | 17 |
| 11775 | 8 | 17 |
| 11778 | 13 | 17 |
| 11779 | 5 | 17 |
| 11780 | 4 | 17 |
| 11785 | 10 | 17 |
| 11787 | 9 | 17 |
| 11791 | 8 | 17 |
| 11793 | 9 | 17 |
| 11795 | 5 | 17 |
| 11798 | 5 | 17 |
| 11799 | 8 | 17 |
| 11801 | 11 | 17 |
| 11804 | 3 | 17 |
| 11806 | 8 | 17 |
| 11809 | 6 | 17 |
| 11811 | 8 | 17 |
| 11813 | 2 | 17 |
| 11816 | 6 | 17 |
| 11818 | 3 | 17 |
| 11820 | 5 | 17 |
| 11823 | 9 | 17 |
| 11824 | 10 | 17 |
| 11825 | 5 | 17 |
| 11826 | 2 | 17 |
| 11828 | 11 | 17 |
| 11829 | 3 | 17 |
| 11832 | 10 | 17 |
| 11833 | 15 | 17 |
| 11834 | 2 | 17 |
| 11838 | 3 | 17 |
| 11839 | 16 | 17 |
| 11840 | 2 | 17 |
| 11841 | 17 | 17 |
| 11842 | 9 | 17 |
| 11843 | 8 | 17 |
| 11844 | 6 | 17 |
| 11849 | 13 | 17 |
| 11850 | 5 | 17 |
| 11852 | 3 | 17 |
| 11854 | 2 | 17 |
| 11858 | 12 | 17 |
| 11859 | 11 | 17 |
| 11863 | 2 | 17 |
| 11864 | 2 | 17 |
| 11865 | 6 | 17 |
| 11868 | 15 | 17 |
| 11872 | 5 | 17 |
| 11874 | 5 | 17 |
| 11875 | 7 | 17 |
| 11876 | 7 | 17 |
| 11877 | 6 | 17 |
| 11879 | 9 | 17 |
| 11881 | 10 | 17 |
| 11882 | 10 | 17 |
| 11884 | 28 | 17 |
| 11887 | 4 | 17 |
| 11888 | 2 | 17 |
| 11889 | 4 | 17 |
| 11893 | 4 | 17 |
| 11894 | 14 | 17 |
| 11895 | 6 | 17 |
| 11896 | 9 | 17 |
| 11898 | 3 | 17 |
| 11899 | 12 | 17 |
| 11900 | 7 | 17 |
| 11901 | 6 | 17 |
| 11906 | 8 | 17 |
| 11908 | 3 | 17 |
| 11909 | 13 | 17 |
| 11914 | 6 | 17 |
| 8 | 15 | 18 |
| 20 | 18 | 18 |
| 22 | 95 | 18 |
| 66 | 29 | 18 |
| 101 | 49 | 18 |
| 136 | 42 | 18 |
| 163 | 9 | 18 |
| 171 | 2 | 18 |
| 172 | 7 | 18 |
| 209 | 7 | 18 |
| 227 | 19 | 18 |
| 232 | 26 | 18 |
| 239 | 10 | 18 |
| 247 | 37 | 18 |
| 253 | 50 | 18 |
| 287 | 37 | 18 |
| 319 | 25 | 18 |
| 332 | 4 | 18 |
| 365 | 28 | 18 |
| 366 | 24 | 18 |
| 381 | 22 | 18 |
| 388 | 19 | 18 |
| 402 | 16 | 18 |
| 434 | 13 | 18 |
| 437 | 8 | 18 |
| 462 | 32 | 18 |
| 479 | 13 | 18 |
| 492 | 5 | 18 |
| 498 | 4 | 18 |
| 501 | 13 | 18 |
| 521 | 24 | 18 |
| 529 | 29 | 18 |
| 535 | 3 | 18 |
| 546 | 7 | 18 |
| 551 | 8 | 18 |
| 555 | 6 | 18 |
| 576 | 27 | 18 |
| 589 | 20 | 18 |
| 591 | 14 | 18 |
| 643 | 20 | 18 |
| 688 | 33 | 18 |
| 698 | 13 | 18 |
| 714 | 6 | 18 |
| 729 | 10 | 18 |
| 745 | 75 | 18 |
| 746 | 9 | 18 |
| 761 | 39 | 18 |
| 780 | 5 | 18 |
| 825 | 32 | 18 |
| 836 | 8 | 18 |
| 857 | 9 | 18 |
| 864 | 15 | 18 |
| 914 | 37 | 18 |
| 916 | 33 | 18 |
| 959 | 2 | 18 |
| 960 | 8 | 18 |
| 984 | 5 | 18 |
| 1012 | 30 | 18 |
| 1047 | 24 | 18 |
| 1055 | 2 | 18 |
| 1114 | 22 | 18 |
| 1128 | 3 | 18 |
| 1147 | 19 | 18 |
| 1154 | 31 | 18 |
| 1165 | 8 | 18 |
| 1220 | 10 | 18 |
| 1260 | 3 | 18 |
| 1283 | 42 | 18 |
| 1287 | 9 | 18 |
| 1295 | 8 | 18 |
| 1311 | 75 | 18 |
| 1319 | 18 | 18 |
| 1346 | 10 | 18 |
| 1381 | 4 | 18 |
| 1384 | 26 | 18 |
| 1386 | 5 | 18 |
| 1388 | 14 | 18 |
| 1412 | 4 | 18 |
| 1415 | 10 | 18 |
| 1428 | 34 | 18 |
| 1445 | 15 | 18 |
| 1465 | 10 | 18 |
| 1495 | 6 | 18 |
| 1496 | 10 | 18 |
| 1509 | 14 | 18 |
| 1535 | 23 | 18 |
| 1549 | 4 | 18 |
| 1554 | 26 | 18 |
| 1570 | 60 | 18 |
| 1577 | 6 | 18 |
| 1591 | 17 | 18 |
| 1605 | 16 | 18 |
| 1619 | 23 | 18 |
| 1635 | 4 | 18 |
| 1650 | 7 | 18 |
| 1669 | 71 | 18 |
| 1676 | 5 | 18 |
| 1695 | 26 | 18 |
| 1710 | 21 | 18 |
| 1737 | 47 | 18 |
| 1742 | 5 | 18 |
| 1761 | 8 | 18 |
| 1811 | 9 | 18 |
| 1834 | 23 | 18 |
| 1861 | 2 | 18 |
| 1895 | 17 | 18 |
| 1905 | 4 | 18 |
| 1927 | 51 | 18 |
| 1957 | 16 | 18 |
| 1971 | 9 | 18 |
| 1979 | 32 | 18 |
| 1997 | 2 | 18 |
| 2068 | 13 | 18 |
| 2070 | 42 | 18 |
| 2076 | 6 | 18 |
| 2079 | 20 | 18 |
| 2123 | 11 | 18 |
| 2183 | 47 | 18 |
| 2192 | 10 | 18 |
| 2223 | 27 | 18 |
| 2250 | 7 | 18 |
| 2279 | 27 | 18 |
| 2313 | 3 | 18 |
| 2319 | 12 | 18 |
| 2329 | 66 | 18 |
| 2360 | 9 | 18 |
| 2373 | 8 | 18 |
| 2398 | 30 | 18 |
| 2410 | 10 | 18 |
| 2419 | 5 | 18 |
| 2448 | 10 | 18 |
| 2451 | 8 | 18 |
| 2458 | 35 | 18 |
| 2513 | 16 | 18 |
| 2528 | 8 | 18 |
| 2594 | 16 | 18 |
| 2604 | 4 | 18 |
| 2607 | 12 | 18 |
| 2610 | 2 | 18 |
| 2619 | 20 | 18 |
| 2661 | 14 | 18 |
| 2676 | 18 | 18 |
| 2693 | 2 | 18 |
| 2706 | 3 | 18 |
| 2707 | 16 | 18 |
| 2737 | 14 | 18 |
| 2744 | 51 | 18 |
| 2774 | 3 | 18 |
| 2787 | 2 | 18 |
| 2799 | 15 | 18 |
| 2802 | 16 | 18 |
| 2828 | 11 | 18 |
| 2843 | 11 | 18 |
| 2853 | 17 | 18 |
| 2872 | 6 | 18 |
| 2876 | 9 | 18 |
| 2878 | 60 | 18 |
| 2931 | 8 | 18 |
| 2935 | 22 | 18 |
| 2940 | 52 | 18 |
| 2954 | 6 | 18 |
| 2959 | 36 | 18 |
| 2960 | 23 | 18 |
| 2968 | 20 | 18 |
| 2990 | 35 | 18 |
| 3039 | 14 | 18 |
| 3065 | 10 | 18 |
| 3081 | 80 | 18 |
| 3100 | 48 | 18 |
| 3102 | 47 | 18 |
| 3103 | 7 | 18 |
| 3107 | 24 | 18 |
| 3140 | 5 | 18 |
| 3142 | 48 | 18 |
| 3163 | 32 | 18 |
| 3164 | 35 | 18 |
| 3170 | 11 | 18 |
| 3200 | 2 | 18 |
| 3213 | 15 | 18 |
| 3215 | 17 | 18 |
| 3245 | 17 | 18 |
| 3255 | 37 | 18 |
| 3271 | 11 | 18 |
| 3275 | 19 | 18 |
| 3281 | 35 | 18 |
| 3289 | 19 | 18 |
| 3301 | 7 | 18 |
| 3318 | 2 | 18 |
| 3320 | 7 | 18 |
| 3325 | 8 | 18 |
| 3334 | 16 | 18 |
| 3349 | 77 | 18 |
| 3353 | 9 | 18 |
| 3369 | 3 | 18 |
| 3390 | 22 | 18 |
| 3391 | 24 | 18 |
| 3398 | 5 | 18 |
| 3420 | 7 | 18 |
| 3423 | 2 | 18 |
| 3433 | 4 | 18 |
| 3446 | 7 | 18 |
| 3451 | 31 | 18 |
| 3454 | 6 | 18 |
| 3464 | 5 | 18 |
| 3484 | 14 | 18 |
| 3519 | 28 | 18 |
| 3575 | 24 | 18 |
| 3580 | 8 | 18 |
| 3584 | 48 | 18 |
| 3590 | 7 | 18 |
| 3627 | 11 | 18 |
| 3633 | 52 | 18 |
| 3658 | 14 | 18 |
| 3660 | 22 | 18 |
| 3755 | 40 | 18 |
| 3760 | 80 | 18 |
| 3811 | 5 | 18 |
| 3830 | 7 | 18 |
| 3835 | 8 | 18 |
| 3847 | 11 | 18 |
| 3848 | 26 | 18 |
| 3873 | 5 | 18 |
| 3882 | 32 | 18 |
| 3901 | 18 | 18 |
| 3909 | 6 | 18 |
| 3921 | 4 | 18 |
| 3948 | 13 | 18 |
| 4030 | 2 | 18 |
| 4060 | 32 | 18 |
| 4099 | 27 | 18 |
| 4115 | 4 | 18 |
| 4119 | 9 | 18 |
| 4140 | 9 | 18 |
| 4163 | 5 | 18 |
| 4175 | 68 | 18 |
| 4202 | 26 | 18 |
| 4204 | 21 | 18 |
| 4226 | 13 | 18 |
| 4248 | 7 | 18 |
| 4256 | 14 | 18 |
| 4281 | 26 | 18 |
| 4282 | 7 | 18 |
| 4291 | 6 | 18 |
| 4306 | 12 | 18 |
| 4322 | 24 | 18 |
| 4329 | 2 | 18 |
| 4347 | 16 | 18 |
| 4353 | 10 | 18 |
| 4380 | 17 | 18 |
| 4414 | 2 | 18 |
| 4433 | 6 | 18 |
| 4442 | 8 | 18 |
| 4526 | 8 | 18 |
| 4535 | 13 | 18 |
| 4545 | 78 | 18 |
| 4567 | 21 | 18 |
| 4569 | 3 | 18 |
| 4575 | 8 | 18 |
| 4626 | 61 | 18 |
| 4641 | 12 | 18 |
| 4686 | 8 | 18 |
| 4697 | 2 | 18 |
| 4711 | 26 | 18 |
| 4717 | 2 | 18 |
| 4733 | 12 | 18 |
| 4805 | 2 | 18 |
| 4808 | 27 | 18 |
| 4824 | 8 | 18 |
| 4844 | 6 | 18 |
| 4852 | 18 | 18 |
| 4866 | 52 | 18 |
| 4876 | 40 | 18 |
| 4899 | 27 | 18 |
| 4935 | 4 | 18 |
| 4957 | 19 | 18 |
| 4963 | 15 | 18 |
| 4972 | 18 | 18 |
| 4977 | 18 | 18 |
| 5010 | 30 | 18 |
| 5018 | 22 | 18 |
| 5069 | 12 | 18 |
| 5083 | 9 | 18 |
| 5110 | 15 | 18 |
| 5134 | 36 | 18 |
| 5156 | 24 | 18 |
| 5164 | 39 | 18 |
| 5168 | 17 | 18 |
| 5191 | 17 | 18 |
| 5192 | 14 | 18 |
| 5217 | 5 | 18 |
| 5244 | 18 | 18 |
| 5249 | 11 | 18 |
| 5262 | 4 | 18 |
| 5275 | 5 | 18 |
| 5292 | 6 | 18 |
| 5294 | 13 | 18 |
| 5326 | 25 | 18 |
| 5342 | 10 | 18 |
| 5356 | 6 | 18 |
| 5366 | 50 | 18 |
| 5373 | 6 | 18 |
| 5388 | 21 | 18 |
| 5394 | 30 | 18 |
| 5403 | 4 | 18 |
| 5422 | 16 | 18 |
| 5424 | 22 | 18 |
| 5440 | 35 | 18 |
| 5457 | 9 | 18 |
| 5501 | 7 | 18 |
| 5508 | 22 | 18 |
| 5519 | 6 | 18 |
| 5526 | 4 | 18 |
| 5530 | 13 | 18 |
| 5548 | 8 | 18 |
| 5563 | 3 | 18 |
| 5564 | 4 | 18 |
| 5569 | 36 | 18 |
| 5629 | 14 | 18 |
| 5632 | 2 | 18 |
| 5633 | 27 | 18 |
| 5664 | 23 | 18 |
| 5677 | 20 | 18 |
| 5706 | 4 | 18 |
| 5754 | 69 | 18 |
| 5796 | 6 | 18 |
| 5813 | 33 | 18 |
| 5888 | 35 | 18 |
| 5957 | 36 | 18 |
| 5981 | 20 | 18 |
| 6023 | 6 | 18 |
| 6050 | 6 | 18 |
| 6081 | 8 | 18 |
| 6102 | 16 | 18 |
| 6116 | 7 | 18 |
| 6152 | 4 | 18 |
| 6172 | 3 | 18 |
| 6212 | 4 | 18 |

**#USER GROWTH ANALYSIS**

WITH New\_Users AS(SELECT COUNT(user\_id) Total\_New\_Users , EXTRACT(MONTH FROM occurred\_at) AS Month

FROM events

WHERE event\_type= "signup\_flow"

GROUP BY MONTH),

Running\_Total AS( SELECT SUM(Total\_New\_Users) OVER(ORDER BY MONTH) AS Running\_Total, Month

FROM New\_Users)

SELECT New\_Users.Month, Total\_New\_Users,Running\_Total, ROUND((Total\_New\_Users/Running\_Total)\*100,2) AS `User Growth in %`

FROM New\_Users, Running\_Total

WHERE New\_Users.Month= Running\_Total.Month;

**Result Set**

|  |  |  |  |
| --- | --- | --- | --- |
| Month | Total\_New\_Users | Running\_Total | User Growth in % |
| 5 | 779 | 779 | 100 |
| 6 | 873 | 1652 | 52.85 |
| 7 | 997 | 2649 | 37.64 |
| 8 | 1031 | 3680 | 28.02 |

**#WEEKLY RETENTION ANALYSIS**

WITH a AS(SELECT user\_id, EXTRACT(WEEK FROM occurred\_at) AS week\_signup,

COUNT(user\_id)OVER(PARTITION BY EXTRACT(WEEK FROM occurred\_at)) count\_signup

FROM events

WHERE event\_type= "signup\_flow")

SELECT week\_signup, count\_signup, EXTRACT(WEEK FROM occurred\_at) week\_engagement,

COUNT(DISTINCT events.user\_id) AS Retention, ROUND((COUNT(DISTINCT events.user\_id)/ count\_signup)\*100,2) AS Retention\_perc

FROM a, events

WHERE a.user\_id= events.user\_id

AND events.event\_type = "engagement"

GROUP BY week\_signup, count\_signup, week\_engagement

ORDER BY week\_signup, week\_engagement;

**Result Set**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| week\_signup | count\_signup | week\_engagement | Retention | Retention\_perc |
| 17 | 72 | 17 | 72 | 100 |
| 17 | 72 | 18 | 59 | 81.94 |
| 17 | 72 | 19 | 24 | 33.33 |
| 17 | 72 | 20 | 16 | 22.22 |
| 17 | 72 | 21 | 11 | 15.28 |
| 17 | 72 | 22 | 16 | 22.22 |
| 17 | 72 | 23 | 11 | 15.28 |
| 17 | 72 | 24 | 9 | 12.5 |
| 17 | 72 | 25 | 6 | 8.33 |
| 17 | 72 | 26 | 8 | 11.11 |
| 17 | 72 | 27 | 8 | 11.11 |
| 17 | 72 | 28 | 8 | 11.11 |
| 17 | 72 | 29 | 7 | 9.72 |
| 17 | 72 | 30 | 9 | 12.5 |
| 17 | 72 | 31 | 6 | 8.33 |
| 17 | 72 | 32 | 5 | 6.94 |
| 17 | 72 | 33 | 1 | 1.39 |
| 17 | 72 | 34 | 2 | 2.78 |
| 18 | 163 | 18 | 163 | 100 |
| 18 | 163 | 19 | 114 | 69.94 |
| 18 | 163 | 20 | 73 | 44.79 |
| 18 | 163 | 21 | 49 | 30.06 |
| 18 | 163 | 22 | 37 | 22.7 |
| 18 | 163 | 23 | 26 | 15.95 |
| 18 | 163 | 24 | 19 | 11.66 |
| 18 | 163 | 25 | 25 | 15.34 |
| 18 | 163 | 26 | 13 | 7.98 |
| 18 | 163 | 27 | 18 | 11.04 |
| 18 | 163 | 28 | 13 | 7.98 |
| 18 | 163 | 29 | 13 | 7.98 |
| 18 | 163 | 30 | 15 | 9.2 |
| 18 | 163 | 31 | 11 | 6.75 |
| 18 | 163 | 32 | 9 | 5.52 |
| 18 | 163 | 33 | 11 | 6.75 |
| 18 | 163 | 34 | 5 | 3.07 |
| 18 | 163 | 35 | 1 | 0.61 |
| 19 | 185 | 19 | 185 | 100 |
| 19 | 185 | 20 | 142 | 76.76 |
| 19 | 185 | 21 | 73 | 39.46 |
| 19 | 185 | 22 | 59 | 31.89 |
| 19 | 185 | 23 | 40 | 21.62 |
| 19 | 185 | 24 | 25 | 13.51 |
| 19 | 185 | 25 | 22 | 11.89 |
| 19 | 185 | 26 | 19 | 10.27 |
| 19 | 185 | 27 | 23 | 12.43 |
| 19 | 185 | 28 | 18 | 9.73 |
| 19 | 185 | 29 | 15 | 8.11 |
| 19 | 185 | 30 | 15 | 8.11 |
| 19 | 185 | 31 | 13 | 7.03 |
| 19 | 185 | 32 | 11 | 5.95 |
| 19 | 185 | 33 | 8 | 4.32 |
| 19 | 185 | 34 | 9 | 4.86 |
| 20 | 176 | 20 | 176 | 100 |
| 20 | 176 | 21 | 128 | 72.73 |
| 20 | 176 | 22 | 86 | 48.86 |
| 20 | 176 | 23 | 52 | 29.55 |
| 20 | 176 | 24 | 39 | 22.16 |
| 20 | 176 | 25 | 29 | 16.48 |
| 20 | 176 | 26 | 22 | 12.5 |
| 20 | 176 | 27 | 32 | 18.18 |
| 20 | 176 | 28 | 22 | 12.5 |
| 20 | 176 | 29 | 21 | 11.93 |
| 20 | 176 | 30 | 23 | 13.07 |
| 20 | 176 | 31 | 16 | 9.09 |
| 20 | 176 | 32 | 17 | 9.66 |
| 20 | 176 | 33 | 9 | 5.11 |
| 20 | 176 | 34 | 10 | 5.68 |
| 21 | 183 | 21 | 183 | 100 |
| 21 | 183 | 22 | 121 | 66.12 |
| 21 | 183 | 23 | 74 | 40.44 |
| 21 | 183 | 24 | 51 | 27.87 |
| 21 | 183 | 25 | 34 | 18.58 |
| 21 | 183 | 26 | 23 | 12.57 |
| 21 | 183 | 27 | 31 | 16.94 |
| 21 | 183 | 28 | 30 | 16.39 |
| 21 | 183 | 29 | 20 | 10.93 |
| 21 | 183 | 30 | 20 | 10.93 |
| 21 | 183 | 31 | 14 | 7.65 |
| 21 | 183 | 32 | 16 | 8.74 |
| 21 | 183 | 33 | 17 | 9.29 |
| 21 | 183 | 34 | 10 | 5.46 |
| 22 | 196 | 22 | 196 | 100 |
| 22 | 196 | 23 | 142 | 72.45 |
| 22 | 196 | 24 | 82 | 41.84 |
| 22 | 196 | 25 | 57 | 29.08 |
| 22 | 196 | 26 | 47 | 23.98 |
| 22 | 196 | 27 | 38 | 19.39 |
| 22 | 196 | 28 | 29 | 14.8 |
| 22 | 196 | 29 | 23 | 11.73 |
| 22 | 196 | 30 | 26 | 13.27 |
| 22 | 196 | 31 | 18 | 9.18 |
| 22 | 196 | 32 | 18 | 9.18 |
| 22 | 196 | 33 | 12 | 6.12 |
| 22 | 196 | 34 | 6 | 3.06 |
| 23 | 196 | 23 | 196 | 100 |
| 23 | 196 | 24 | 146 | 74.49 |
| 23 | 196 | 25 | 85 | 43.37 |
| 23 | 196 | 26 | 57 | 29.08 |
| 23 | 196 | 27 | 51 | 26.02 |
| 23 | 196 | 28 | 43 | 21.94 |
| 23 | 196 | 29 | 35 | 17.86 |
| 23 | 196 | 30 | 27 | 13.78 |
| 23 | 196 | 31 | 22 | 11.22 |
| 23 | 196 | 32 | 20 | 10.2 |
| 23 | 196 | 33 | 14 | 7.14 |
| 23 | 196 | 34 | 11 | 5.61 |
| 24 | 229 | 24 | 229 | 100 |
| 24 | 229 | 25 | 151 | 65.94 |
| 24 | 229 | 26 | 89 | 38.86 |
| 24 | 229 | 27 | 58 | 25.33 |
| 24 | 229 | 28 | 41 | 17.9 |
| 24 | 229 | 29 | 32 | 13.97 |
| 24 | 229 | 30 | 30 | 13.1 |
| 24 | 229 | 31 | 25 | 10.92 |
| 24 | 229 | 32 | 15 | 6.55 |
| 24 | 229 | 33 | 19 | 8.3 |
| 24 | 229 | 34 | 11 | 4.8 |
| 25 | 207 | 25 | 207 | 100 |
| 25 | 207 | 26 | 165 | 79.71 |
| 25 | 207 | 27 | 97 | 46.86 |
| 25 | 207 | 28 | 61 | 29.47 |
| 25 | 207 | 29 | 40 | 19.32 |
| 25 | 207 | 30 | 29 | 14.01 |
| 25 | 207 | 31 | 22 | 10.63 |
| 25 | 207 | 32 | 19 | 9.18 |
| 25 | 207 | 33 | 15 | 7.25 |
| 25 | 207 | 34 | 16 | 7.73 |
| 26 | 201 | 26 | 201 | 100 |
| 26 | 201 | 27 | 138 | 68.66 |
| 26 | 201 | 28 | 84 | 41.79 |
| 26 | 201 | 29 | 60 | 29.85 |
| 26 | 201 | 30 | 45 | 22.39 |
| 26 | 201 | 31 | 35 | 17.41 |
| 26 | 201 | 32 | 32 | 15.92 |
| 26 | 201 | 33 | 25 | 12.44 |
| 26 | 201 | 34 | 16 | 7.96 |
| 27 | 222 | 27 | 222 | 100 |
| 27 | 222 | 28 | 161 | 72.52 |
| 27 | 222 | 29 | 95 | 42.79 |
| 27 | 222 | 30 | 80 | 36.04 |
| 27 | 222 | 31 | 51 | 22.97 |
| 27 | 222 | 32 | 38 | 17.12 |
| 27 | 222 | 33 | 27 | 12.16 |
| 27 | 222 | 34 | 23 | 10.36 |
| 28 | 215 | 28 | 215 | 100 |
| 28 | 215 | 29 | 161 | 74.88 |
| 28 | 215 | 30 | 92 | 42.79 |
| 28 | 215 | 31 | 56 | 26.05 |
| 28 | 215 | 32 | 35 | 16.28 |
| 28 | 215 | 33 | 18 | 8.37 |
| 28 | 215 | 34 | 19 | 8.84 |
| 29 | 221 | 29 | 221 | 100 |
| 29 | 221 | 30 | 160 | 72.4 |
| 29 | 221 | 31 | 81 | 36.65 |
| 29 | 221 | 32 | 53 | 23.98 |
| 29 | 221 | 33 | 39 | 17.65 |
| 29 | 221 | 34 | 33 | 14.93 |
| 29 | 221 | 35 | 1 | 0.45 |
| 30 | 238 | 30 | 238 | 100 |
| 30 | 238 | 31 | 171 | 71.85 |
| 30 | 238 | 32 | 94 | 39.5 |
| 30 | 238 | 33 | 65 | 27.31 |
| 30 | 238 | 34 | 43 | 18.07 |
| 30 | 238 | 35 | 3 | 1.26 |
| 31 | 193 | 31 | 193 | 100 |
| 31 | 193 | 32 | 136 | 70.47 |
| 31 | 193 | 33 | 69 | 35.75 |
| 31 | 193 | 34 | 52 | 26.94 |
| 31 | 193 | 35 | 1 | 0.52 |
| 32 | 245 | 32 | 245 | 100 |
| 32 | 245 | 33 | 174 | 71.02 |
| 32 | 245 | 34 | 81 | 33.06 |
| 32 | 245 | 35 | 8 | 3.27 |
| 33 | 261 | 33 | 261 | 100 |
| 33 | 261 | 34 | 187 | 71.65 |
| 33 | 261 | 35 | 8 | 3.07 |
| 34 | 259 | 34 | 259 | 100 |
| 34 | 259 | 35 | 43 | 16.6 |
| 35 | 18 | 35 | 18 | 100 |

**#Weekly Engagement Per Device**

SELECT

COUNT(user\_id) users\_count,

EXTRACT(WEEK FROM occurred\_at) `week`,

device

FROM

events

GROUP BY Device , week

ORDER BY week;

**Result Set**

|  |  |  |
| --- | --- | --- |
| users\_count | week | device |
| 506 | 17 | dell inspiron notebook |
| 715 | 17 | iphone 5 |
| 219 | 17 | iphone 4s |
| 385 | 17 | nexus 5 |
| 71 | 17 | samsumg galaxy tablet |
| 476 | 17 | iphone 5s |
| 1527 | 17 | macbook pro |
| 454 | 17 | samsung galaxy s4 |
| 207 | 17 | acer aspire notebook |
| 493 | 17 | macbook air |
| 801 | 17 | lenovo thinkpad |
| 117 | 17 | samsung galaxy note |
| 60 | 17 | mac mini |
| 134 | 17 | hp pavilion desktop |
| 181 | 17 | nexus 7 |
| 254 | 17 | asus chromebook |
| 331 | 17 | ipad air |
| 192 | 17 | htc one |
| 188 | 17 | dell inspiron desktop |
| 208 | 17 | ipad mini |
| 84 | 17 | amazon fire phone |
| 69 | 17 | acer aspire desktop |
| 130 | 17 | nokia lumia 635 |
| 145 | 17 | nexus 10 |
| 57 | 17 | kindle fire |
| 87 | 17 | windows surface |
| 451 | 18 | iphone 4s |
| 1617 | 18 | macbook air |
| 3334 | 18 | macbook pro |
| 269 | 18 | kindle fire |
| 313 | 18 | ipad mini |
| 255 | 18 | nexus 7 |
| 1140 | 18 | samsung galaxy s4 |
| 1752 | 18 | lenovo thinkpad |
| 1333 | 18 | iphone 5 |
| 963 | 18 | dell inspiron notebook |
| 526 | 18 | asus chromebook |
| 945 | 18 | nexus 5 |
| 366 | 18 | acer aspire notebook |
| 345 | 18 | nokia lumia 635 |
| 786 | 18 | iphone 5s |
| 179 | 18 | amazon fire phone |
| 372 | 18 | nexus 10 |
| 143 | 18 | samsung galaxy note |
| 379 | 18 | hp pavilion desktop |
| 160 | 18 | mac mini |
| 528 | 18 | ipad air |
| 176 | 18 | htc one |
| 686 | 18 | dell inspiron desktop |
| 299 | 18 | acer aspire desktop |
| 108 | 18 | windows surface |
| 79 | 18 | samsumg galaxy tablet |
| 165 | 19 | windows surface |
| 972 | 19 | iphone 5s |
| 412 | 19 | acer aspire notebook |
| 1199 | 19 | dell inspiron notebook |
| 381 | 19 | ipad mini |
| 270 | 19 | asus chromebook |
| 3189 | 19 | macbook pro |
| 958 | 19 | nexus 5 |
| 552 | 19 | iphone 4s |
| 256 | 19 | mac mini |
| 1351 | 19 | macbook air |
| 1036 | 19 | samsung galaxy s4 |
| 120 | 19 | samsung galaxy note |
| 275 | 19 | htc one |
| 338 | 19 | nexus 7 |
| 604 | 19 | ipad air |
| 2163 | 19 | lenovo thinkpad |
| 445 | 19 | dell inspiron desktop |
| 1208 | 19 | iphone 5 |
| 235 | 19 | nexus 10 |
| 229 | 19 | kindle fire |
| 381 | 19 | hp pavilion desktop |
| 145 | 19 | amazon fire phone |
| 217 | 19 | nokia lumia 635 |
| 242 | 19 | acer aspire desktop |
| 66 | 19 | samsumg galaxy tablet |
| 3129 | 20 | macbook pro |
| 983 | 20 | dell inspiron notebook |
| 194 | 20 | windows surface |
| 1009 | 20 | samsung galaxy s4 |
| 156 | 20 | nokia lumia 635 |
| 1314 | 20 | iphone 5 |
| 612 | 20 | iphone 4s |
| 1285 | 20 | nexus 5 |
| 486 | 20 | acer aspire notebook |
| 243 | 20 | kindle fire |
| 616 | 20 | ipad air |
| 270 | 20 | ipad mini |
| 2222 | 20 | lenovo thinkpad |
| 375 | 20 | nexus 7 |
| 1460 | 20 | macbook air |
| 515 | 20 | dell inspiron desktop |
| 228 | 20 | acer aspire desktop |
| 1037 | 20 | iphone 5s |
| 163 | 20 | samsung galaxy note |
| 274 | 20 | mac mini |
| 467 | 20 | asus chromebook |
| 220 | 20 | nexus 10 |
| 278 | 20 | hp pavilion desktop |
| 105 | 20 | amazon fire phone |
| 368 | 20 | htc one |
| 78 | 20 | samsumg galaxy tablet |
| 3069 | 21 | macbook pro |
| 64 | 21 | samsumg galaxy tablet |
| 529 | 21 | iphone 4s |
| 331 | 21 | acer aspire desktop |
| 1279 | 21 | macbook air |
| 1588 | 21 | iphone 5 |
| 965 | 21 | dell inspiron notebook |
| 558 | 21 | asus chromebook |
| 1912 | 21 | lenovo thinkpad |
| 283 | 21 | ipad mini |
| 571 | 21 | dell inspiron desktop |
| 813 | 21 | iphone 5s |
| 263 | 21 | htc one |
| 1035 | 21 | nexus 5 |
| 482 | 21 | hp pavilion desktop |
| 435 | 21 | ipad air |
| 213 | 21 | nexus 7 |
| 263 | 21 | nexus 10 |
| 186 | 21 | windows surface |
| 466 | 21 | acer aspire notebook |
| 969 | 21 | samsung galaxy s4 |
| 200 | 21 | samsung galaxy note |
| 191 | 21 | nokia lumia 635 |
| 358 | 21 | kindle fire |
| 282 | 21 | mac mini |
| 29 | 21 | amazon fire phone |
| 1028 | 22 | samsung galaxy s4 |
| 3073 | 22 | macbook pro |
| 483 | 22 | iphone 4s |
| 1826 | 22 | lenovo thinkpad |
| 1242 | 22 | nexus 5 |
| 1403 | 22 | iphone 5 |
| 190 | 22 | windows surface |
| 1740 | 22 | macbook air |
| 932 | 22 | iphone 5s |
| 744 | 22 | dell inspiron desktop |
| 596 | 22 | ipad air |
| 316 | 22 | nexus 10 |
| 345 | 22 | ipad mini |
| 311 | 22 | nokia lumia 635 |
| 639 | 22 | asus chromebook |
| 1026 | 22 | dell inspiron notebook |
| 439 | 22 | nexus 7 |
| 375 | 22 | hp pavilion desktop |
| 48 | 22 | amazon fire phone |
| 437 | 22 | acer aspire notebook |
| 278 | 22 | mac mini |
| 325 | 22 | htc one |
| 234 | 22 | kindle fire |
| 72 | 22 | samsumg galaxy tablet |
| 255 | 22 | acer aspire desktop |
| 252 | 22 | samsung galaxy note |
| 3149 | 23 | macbook pro |
| 465 | 23 | iphone 4s |
| 307 | 23 | nexus 7 |
| 679 | 23 | asus chromebook |
| 867 | 23 | iphone 5s |
| 1103 | 23 | samsung galaxy s4 |
| 1003 | 23 | nexus 5 |
| 665 | 23 | hp pavilion desktop |
| 1764 | 23 | iphone 5 |
| 1451 | 23 | macbook air |
| 503 | 23 | dell inspiron desktop |
| 1906 | 23 | lenovo thinkpad |
| 263 | 23 | ipad mini |
| 456 | 23 | acer aspire notebook |
| 356 | 23 | kindle fire |
| 101 | 23 | samsumg galaxy tablet |
| 1044 | 23 | dell inspiron notebook |
| 235 | 23 | htc one |
| 244 | 23 | acer aspire desktop |
| 172 | 23 | mac mini |
| 537 | 23 | nexus 10 |
| 157 | 23 | windows surface |
| 182 | 23 | amazon fire phone |
| 409 | 23 | ipad air |
| 275 | 23 | nokia lumia 635 |
| 183 | 23 | samsung galaxy note |
| 478 | 24 | asus chromebook |
| 1742 | 24 | macbook air |
| 215 | 24 | windows surface |
| 725 | 24 | hp pavilion desktop |
| 317 | 24 | ipad mini |
| 3067 | 24 | macbook pro |
| 1091 | 24 | dell inspiron notebook |
| 969 | 24 | iphone 5s |
| 1829 | 24 | lenovo thinkpad |
| 425 | 24 | nexus 7 |
| 242 | 24 | kindle fire |
| 1497 | 24 | iphone 5 |
| 101 | 24 | samsumg galaxy tablet |
| 614 | 24 | iphone 4s |
| 1160 | 24 | nexus 5 |
| 719 | 24 | dell inspiron desktop |
| 957 | 24 | samsung galaxy s4 |
| 626 | 24 | ipad air |
| 374 | 24 | nexus 10 |
| 140 | 24 | htc one |
| 490 | 24 | nokia lumia 635 |
| 149 | 24 | amazon fire phone |
| 514 | 24 | acer aspire notebook |
| 300 | 24 | mac mini |
| 294 | 24 | acer aspire desktop |
| 246 | 24 | samsung galaxy note |
| 2966 | 25 | macbook pro |
| 1116 | 25 | samsung galaxy s4 |
| 561 | 25 | nexus 7 |
| 2118 | 25 | lenovo thinkpad |
| 452 | 25 | nokia lumia 635 |
| 654 | 25 | dell inspiron desktop |
| 1283 | 25 | macbook air |
| 438 | 25 | asus chromebook |
| 444 | 25 | iphone 4s |
| 969 | 25 | iphone 5s |
| 1661 | 25 | iphone 5 |
| 1229 | 25 | dell inspiron notebook |
| 288 | 25 | htc one |
| 132 | 25 | amazon fire phone |
| 161 | 25 | samsumg galaxy tablet |
| 238 | 25 | windows surface |
| 264 | 25 | acer aspire desktop |
| 261 | 25 | nexus 10 |
| 612 | 25 | acer aspire notebook |
| 943 | 25 | nexus 5 |
| 593 | 25 | hp pavilion desktop |
| 233 | 25 | mac mini |
| 651 | 25 | ipad air |
| 237 | 25 | ipad mini |
| 211 | 25 | kindle fire |
| 134 | 25 | samsung galaxy note |
| 1508 | 26 | macbook air |
| 461 | 26 | nokia lumia 635 |
| 2236 | 26 | lenovo thinkpad |
| 263 | 26 | nexus 10 |
| 3341 | 26 | macbook pro |
| 1122 | 26 | samsung galaxy s4 |
| 434 | 26 | nexus 7 |
| 317 | 26 | acer aspire desktop |
| 181 | 26 | windows surface |
| 1624 | 26 | iphone 5 |
| 142 | 26 | mac mini |
| 639 | 26 | asus chromebook |
| 98 | 26 | samsung galaxy note |
| 255 | 26 | kindle fire |
| 1085 | 26 | dell inspiron notebook |
| 517 | 26 | hp pavilion desktop |
| 137 | 26 | amazon fire phone |
| 226 | 26 | htc one |
| 584 | 26 | ipad air |
| 1043 | 26 | iphone 5s |
| 679 | 26 | dell inspiron desktop |
| 918 | 26 | nexus 5 |
| 334 | 26 | acer aspire notebook |
| 509 | 26 | iphone 4s |
| 468 | 26 | ipad mini |
| 141 | 26 | samsumg galaxy tablet |
| 109 | 27 | amazon fire phone |
| 733 | 27 | iphone 4s |
| 3593 | 27 | macbook pro |
| 965 | 27 | iphone 5s |
| 1889 | 27 | iphone 5 |
| 594 | 27 | hp pavilion desktop |
| 171 | 27 | mac mini |
| 1668 | 27 | macbook air |
| 324 | 27 | nexus 10 |
| 371 | 27 | nexus 7 |
| 2255 | 27 | lenovo thinkpad |
| 997 | 27 | dell inspiron notebook |
| 1025 | 27 | nexus 5 |
| 1169 | 27 | samsung galaxy s4 |
| 546 | 27 | dell inspiron desktop |
| 345 | 27 | ipad mini |
| 516 | 27 | asus chromebook |
| 227 | 27 | htc one |
| 350 | 27 | windows surface |
| 299 | 27 | acer aspire desktop |
| 589 | 27 | acer aspire notebook |
| 327 | 27 | nokia lumia 635 |
| 272 | 27 | kindle fire |
| 487 | 27 | ipad air |
| 133 | 27 | samsung galaxy note |
| 149 | 27 | samsumg galaxy tablet |
| 1669 | 28 | iphone 5 |
| 1197 | 28 | dell inspiron notebook |
| 3496 | 28 | macbook pro |
| 1277 | 28 | samsung galaxy s4 |
| 2582 | 28 | lenovo thinkpad |
| 408 | 28 | nokia lumia 635 |
| 1692 | 28 | macbook air |
| 556 | 28 | ipad air |
| 346 | 28 | nexus 7 |
| 751 | 28 | dell inspiron desktop |
| 1046 | 28 | iphone 5s |
| 348 | 28 | kindle fire |
| 319 | 28 | htc one |
| 628 | 28 | hp pavilion desktop |
| 368 | 28 | ipad mini |
| 790 | 28 | iphone 4s |
| 549 | 28 | acer aspire notebook |
| 52 | 28 | amazon fire phone |
| 266 | 28 | nexus 10 |
| 955 | 28 | nexus 5 |
| 120 | 28 | samsung galaxy note |
| 344 | 28 | mac mini |
| 305 | 28 | acer aspire desktop |
| 309 | 28 | windows surface |
| 516 | 28 | asus chromebook |
| 102 | 28 | samsumg galaxy tablet |
| 2464 | 29 | lenovo thinkpad |
| 1713 | 29 | macbook air |
| 1610 | 29 | iphone 5 |
| 468 | 29 | nokia lumia 635 |
| 567 | 29 | dell inspiron desktop |
| 3189 | 29 | macbook pro |
| 942 | 29 | iphone 5s |
| 369 | 29 | ipad mini |
| 297 | 29 | kindle fire |
| 592 | 29 | acer aspire notebook |
| 275 | 29 | nexus 10 |
| 1193 | 29 | dell inspiron notebook |
| 397 | 29 | nexus 7 |
| 534 | 29 | asus chromebook |
| 612 | 29 | iphone 4s |
| 747 | 29 | hp pavilion desktop |
| 215 | 29 | acer aspire desktop |
| 1478 | 29 | samsung galaxy s4 |
| 802 | 29 | nexus 5 |
| 143 | 29 | samsung galaxy note |
| 628 | 29 | ipad air |
| 94 | 29 | amazon fire phone |
| 121 | 29 | samsumg galaxy tablet |
| 344 | 29 | mac mini |
| 231 | 29 | htc one |
| 263 | 29 | windows surface |
| 3603 | 30 | macbook pro |
| 1215 | 30 | samsung galaxy s4 |
| 2614 | 30 | lenovo thinkpad |
| 654 | 30 | acer aspire notebook |
| 320 | 30 | mac mini |
| 750 | 30 | iphone 4s |
| 1177 | 30 | iphone 5s |
| 1503 | 30 | dell inspiron notebook |
| 1558 | 30 | iphone 5 |
| 1743 | 30 | macbook air |
| 633 | 30 | nexus 7 |
| 999 | 30 | nexus 5 |
| 377 | 30 | ipad mini |
| 691 | 30 | dell inspiron desktop |
| 574 | 30 | asus chromebook |
| 665 | 30 | ipad air |
| 473 | 30 | hp pavilion desktop |
| 159 | 30 | samsung galaxy note |
| 235 | 30 | kindle fire |
| 340 | 30 | nokia lumia 635 |
| 408 | 30 | acer aspire desktop |
| 290 | 30 | nexus 10 |
| 139 | 30 | samsumg galaxy tablet |
| 172 | 30 | windows surface |
| 172 | 30 | amazon fire phone |
| 307 | 30 | htc one |
| 582 | 31 | ipad air |
| 671 | 31 | iphone 5s |
| 469 | 31 | dell inspiron desktop |
| 1514 | 31 | iphone 5 |
| 2129 | 31 | lenovo thinkpad |
| 636 | 31 | iphone 4s |
| 1252 | 31 | dell inspiron notebook |
| 3649 | 31 | macbook pro |
| 218 | 31 | windows surface |
| 1586 | 31 | macbook air |
| 1083 | 31 | samsung galaxy s4 |
| 694 | 31 | nexus 5 |
| 113 | 31 | samsung galaxy note |
| 641 | 31 | asus chromebook |
| 411 | 31 | nexus 7 |
| 562 | 31 | acer aspire notebook |
| 605 | 31 | hp pavilion desktop |
| 386 | 31 | acer aspire desktop |
| 276 | 31 | nexus 10 |
| 304 | 31 | nokia lumia 635 |
| 233 | 31 | mac mini |
| 137 | 31 | kindle fire |
| 81 | 31 | samsumg galaxy tablet |
| 242 | 31 | ipad mini |
| 118 | 31 | htc one |
| 157 | 31 | amazon fire phone |
| 1323 | 32 | iphone 5 |
| 3372 | 32 | macbook pro |
| 1921 | 32 | lenovo thinkpad |
| 323 | 32 | iphone 4s |
| 587 | 32 | acer aspire notebook |
| 119 | 32 | samsung galaxy note |
| 78 | 32 | samsumg galaxy tablet |
| 1242 | 32 | dell inspiron notebook |
| 788 | 32 | iphone 5s |
| 824 | 32 | samsung galaxy s4 |
| 166 | 32 | amazon fire phone |
| 71 | 32 | kindle fire |
| 522 | 32 | dell inspiron desktop |
| 683 | 32 | nexus 5 |
| 619 | 32 | asus chromebook |
| 262 | 32 | ipad mini |
| 240 | 32 | nexus 7 |
| 475 | 32 | ipad air |
| 1283 | 32 | macbook air |
| 558 | 32 | hp pavilion desktop |
| 325 | 32 | nexus 10 |
| 358 | 32 | acer aspire desktop |
| 88 | 32 | windows surface |
| 359 | 32 | nokia lumia 635 |
| 122 | 32 | mac mini |
| 149 | 32 | htc one |
| 368 | 33 | acer aspire desktop |
| 414 | 33 | dell inspiron desktop |
| 131 | 33 | samsung galaxy note |
| 382 | 33 | ipad air |
| 355 | 33 | iphone 4s |
| 651 | 33 | nexus 5 |
| 3243 | 33 | macbook pro |
| 725 | 33 | iphone 5s |
| 383 | 33 | hp pavilion desktop |
| 505 | 33 | acer aspire notebook |
| 1639 | 33 | macbook air |
| 266 | 33 | ipad mini |
| 260 | 33 | nexus 7 |
| 586 | 33 | asus chromebook |
| 748 | 33 | samsung galaxy s4 |
| 337 | 33 | mac mini |
| 168 | 33 | nexus 10 |
| 133 | 33 | windows surface |
| 124 | 33 | kindle fire |
| 1222 | 33 | iphone 5 |
| 2177 | 33 | lenovo thinkpad |
| 142 | 33 | htc one |
| 87 | 33 | samsumg galaxy tablet |
| 1025 | 33 | dell inspiron notebook |
| 218 | 33 | nokia lumia 635 |
| 117 | 33 | amazon fire phone |
| 480 | 34 | iphone 4s |
| 1100 | 34 | dell inspiron notebook |
| 354 | 34 | hp pavilion desktop |
| 729 | 34 | iphone 5s |
| 570 | 34 | asus chromebook |
| 982 | 34 | iphone 5 |
| 314 | 34 | ipad air |
| 1472 | 34 | macbook air |
| 573 | 34 | acer aspire notebook |
| 3182 | 34 | macbook pro |
| 337 | 34 | nexus 7 |
| 784 | 34 | nexus 5 |
| 120 | 34 | samsumg galaxy tablet |
| 166 | 34 | windows surface |
| 472 | 34 | dell inspiron desktop |
| 276 | 34 | htc one |
| 1945 | 34 | lenovo thinkpad |
| 401 | 34 | mac mini |
| 152 | 34 | nokia lumia 635 |
| 284 | 34 | acer aspire desktop |
| 214 | 34 | nexus 10 |
| 896 | 34 | samsung galaxy s4 |
| 111 | 34 | amazon fire phone |
| 255 | 34 | ipad mini |
| 97 | 34 | samsung galaxy note |
| 120 | 34 | kindle fire |
| 69 | 35 | dell inspiron notebook |
| 58 | 35 | iphone 4s |
| 8 | 35 | nokia lumia 635 |
| 19 | 35 | htc one |
| 126 | 35 | lenovo thinkpad |
| 124 | 35 | macbook pro |
| 35 | 35 | nexus 5 |
| 5 | 35 | dell inspiron desktop |
| 66 | 35 | macbook air |
| 29 | 35 | acer aspire notebook |
| 31 | 35 | windows surface |
| 22 | 35 | ipad mini |
| 25 | 35 | mac mini |
| 29 | 35 | samsung galaxy s4 |
| 38 | 35 | asus chromebook |
| 7 | 35 | acer aspire desktop |
| 32 | 35 | kindle fire |
| 10 | 35 | hp pavilion desktop |
| 9 | 35 | iphone 5 |
| 22 | 35 | iphone 5s |
| 6 | 35 | samsung galaxy note |
| 15 | 35 | nexus 10 |
| 17 | 35 | nexus 7 |

**#Email Engagement Analysis**

SELECT

COUNT(user\_id) users\_count, action

FROM

email\_events

WHERE

action IN ('email\_open' , 'email\_clickthrough')

GROUP BY action;

**Result Set**

|  |  |
| --- | --- |
| users\_count | action |
| 20459 | email\_open |
| 9010 | email\_clickthrough |