INSTAGRAM USER ANALYTICS

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PROJECT DESCRIPTION

- User Analysis is the process of understanding how users interact with your product such as website. Mobile app or any software.
- User Analysis collect data on users to enhance the product for better user experience.
- Here in this project we are going to analyse Instagram user data and provide insights to the management team which could potentially influence the future development of the Instagram app

PROJECT APPROACH

Here I used SQL to execute queries and answer questions posed by management teams which is

A. Marketing Analysis
    1. Loyal user reward
    2. Inactive user engagement
    3. Most liked photo
    4. Most popular hastags
    5. Best days to launch AD campaign

B. Investor Metrics
    1. User engagement
    2. Identify potential bot & fake accounts

SOFTWARE USED

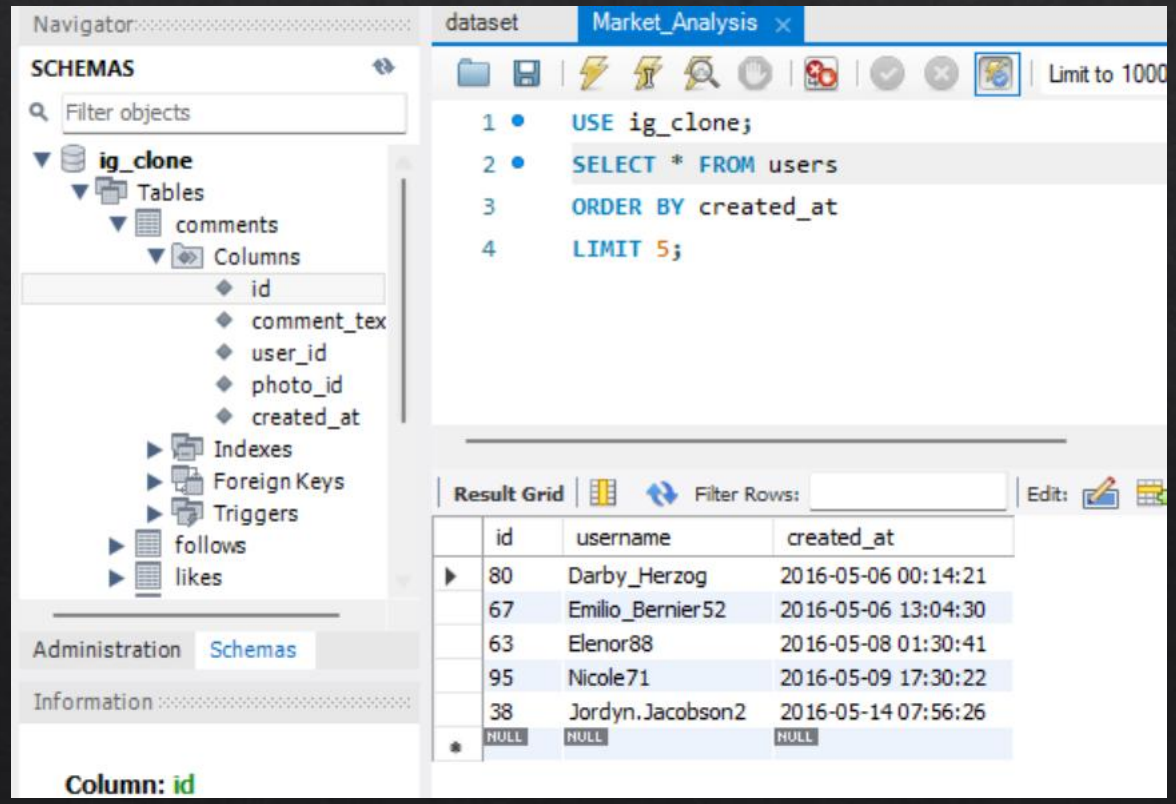
MySQL Workbench 8.0 CE

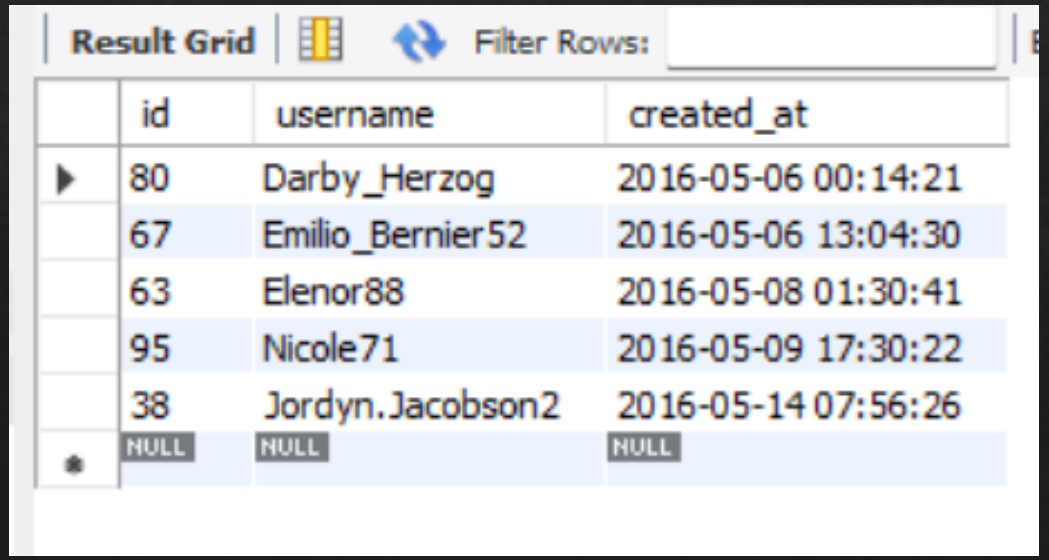
INSIGHTS

A. MARKETING

1. Loyalty User Reward –

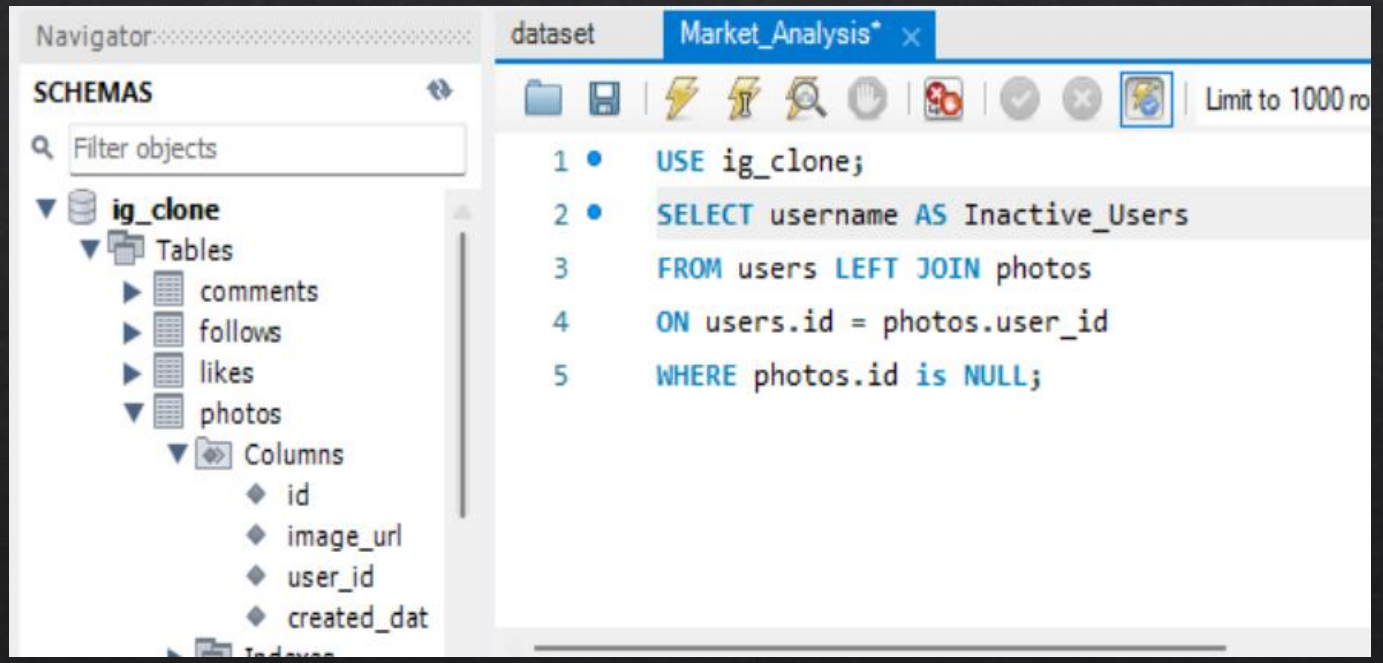
- Marketing team wants to reward top 5 most loyal users i.e. oldest users.
- From the database here are the oldest users



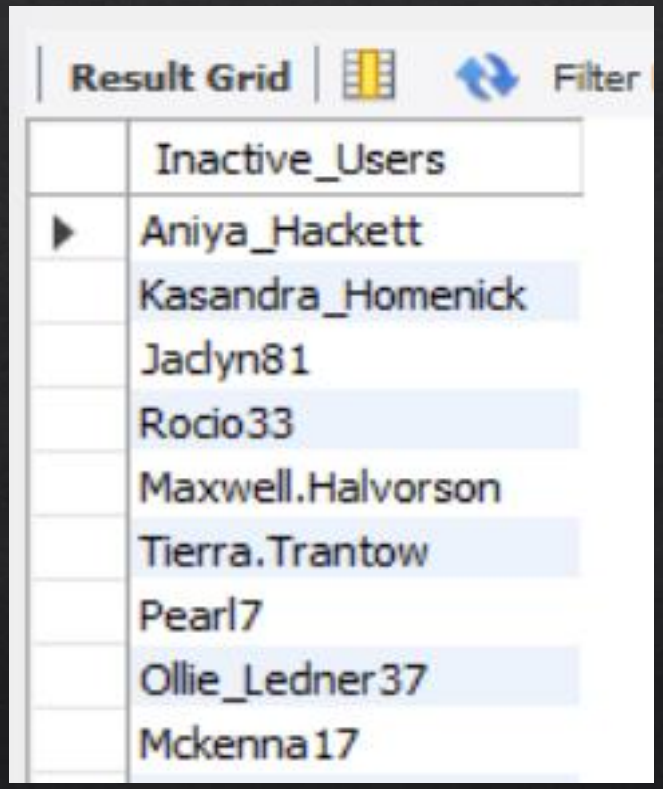


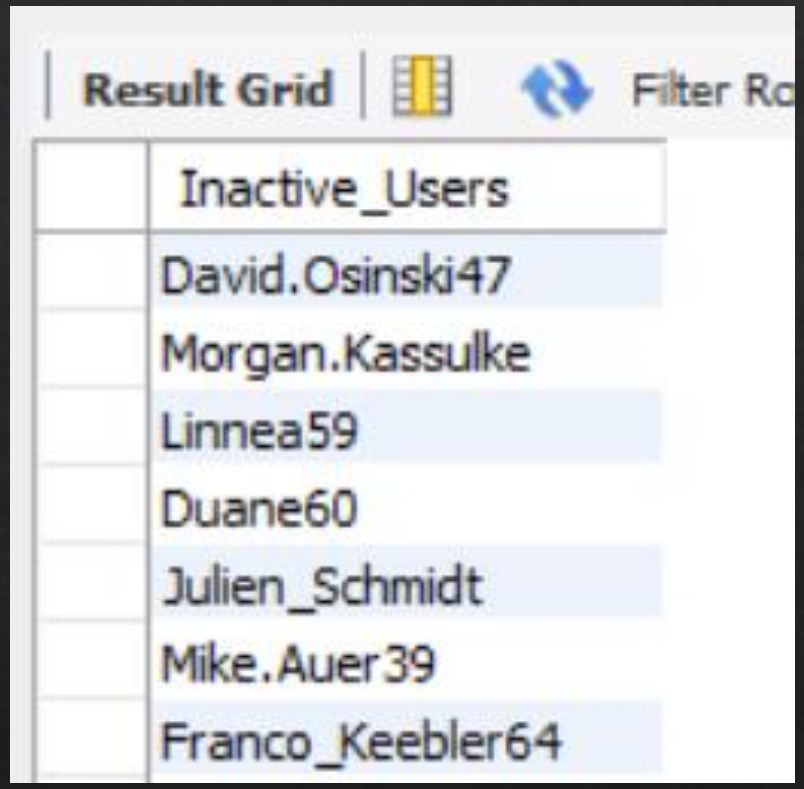
2. Inactive user engagement -

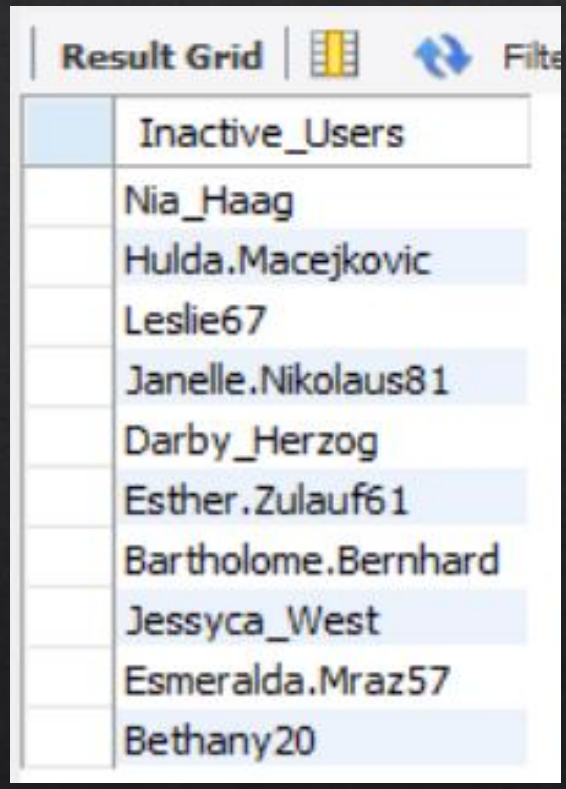
- Marketing team wants to encourage inactive users to start posting by sending promotional emails.
- From the database here is the inactive users list



These are the users who have never posted a single photo on Instagram.

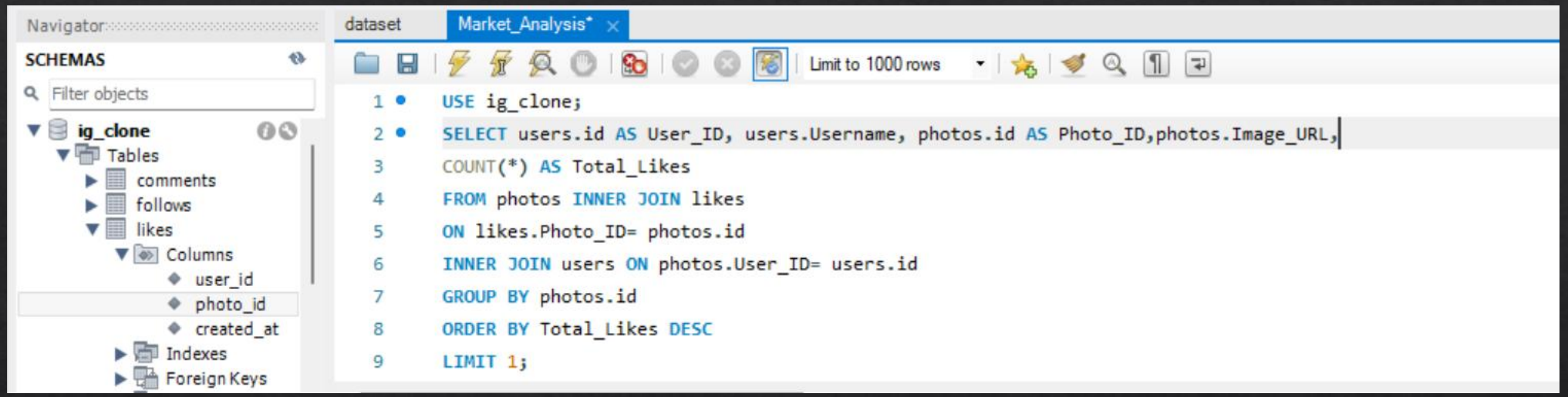


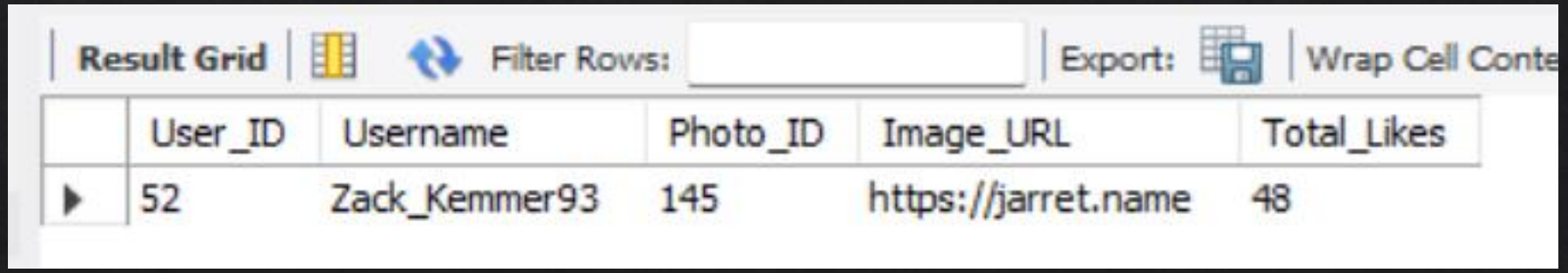




3. Contest winner declaration -

- Team wants to conduct a contest for finding the user with the most likes on a single photo wins.
- Here is the insight





User_ID	Username	Photo_ID	Image_URL	Total_Likes
52	Zack_Kemmer93	145	https://jarret.name	48

4. Hashtag Research -

- Partner brand wants to know the most popular hashtags to use their posts to reach the most people
- Here is the insights from the given database

dataset | Market_Analysis*

Limit to 1000 rows

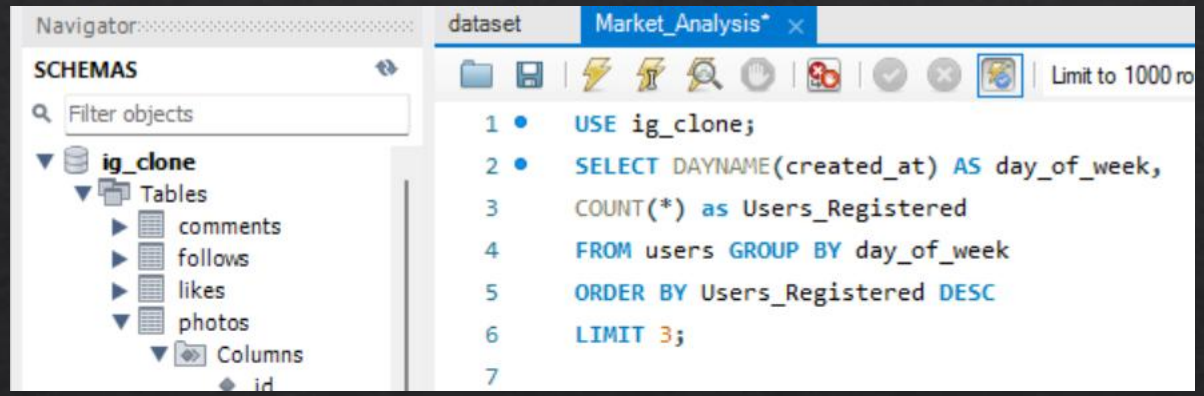
```
1  USE ig_clone;
2  SELECT tags.tag_name AS Tag_Name, COUNT(*) as Number_of_times_used
3  FROM tags JOIN photo_tags ON tags.id = photo_tags.tag_id
4  GROUP BY tags.Tag_Name
5  ORDER BY Number_of_times_used DESC
6  LIMIT 5;
7
```

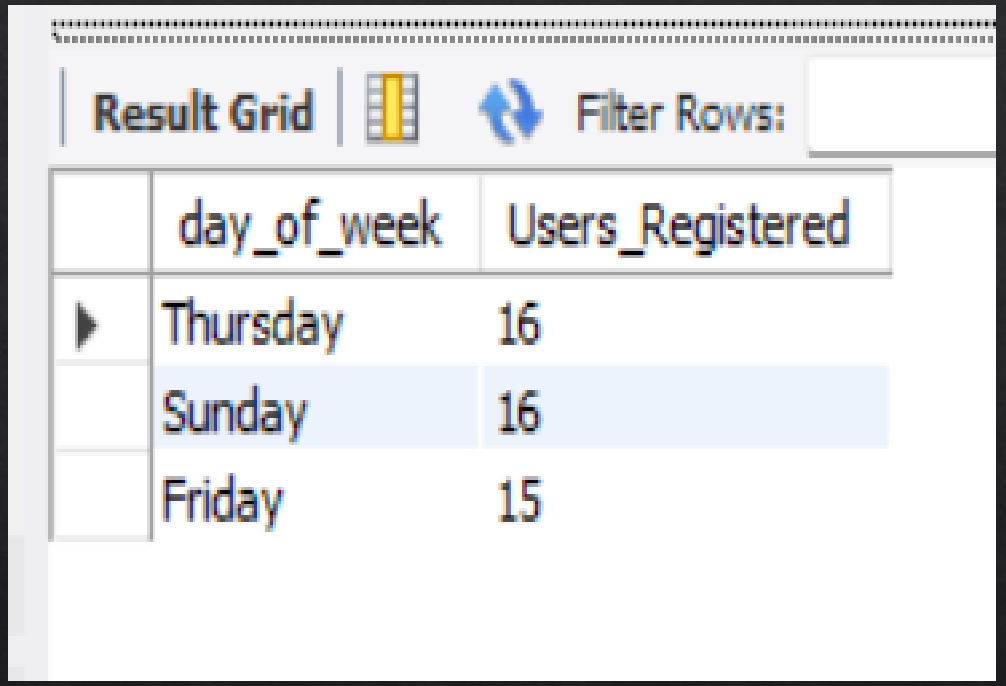
Result Grid | Filter Rows:

Tag_Name	Number_of_times_used
smile	59
beach	42
party	39
fun	38
concert	24

5. Ad Campaign Launch -

Team wants to know the best day of the week to launch ads.
Here is the result of top 3 day of the week where the most people register on Instagram.

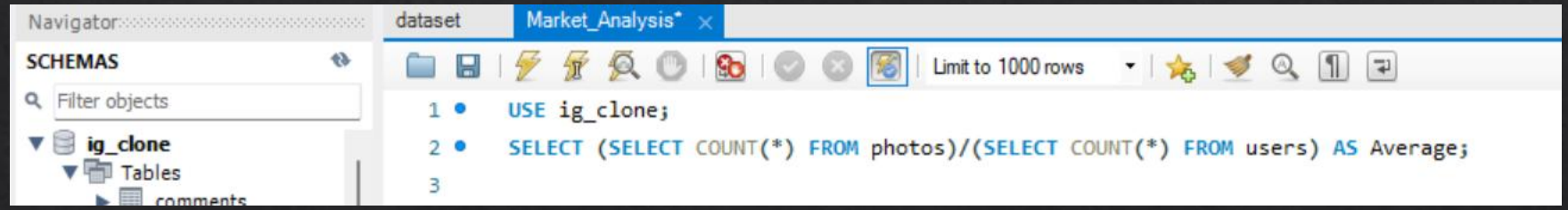


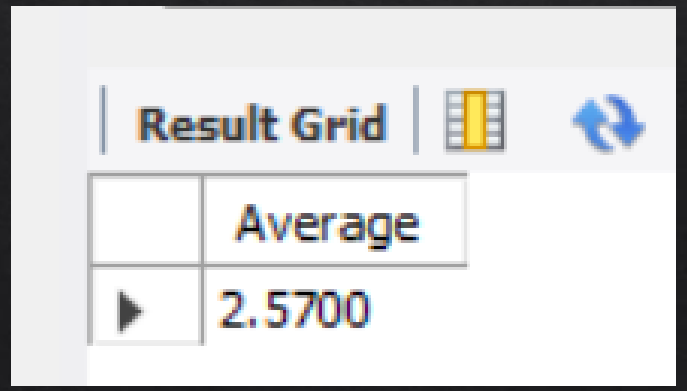


B. INVESTOR METRICS

1. User engagement -

- Investors wants to know if the users are still active and posting on Instagram or if they are making fewer posts.
- Here the insight of average number of posts per user on Instagram.





2. Bots and Fake accounts -

- Investors wants to know if the platform is crowded with fake and dummy accounts.
- Here is the results of users who have liked every single photo on the site
- Because it is typically not possible for a normal user to do such things.

dataset | Market_Analysis*

Limit to 1000 rows

```
1  USE ig_clone;
2  SELECT user_id, username, COUNT(*) AS total_likes_per_user
3  FROM users INNER JOIN likes ON users.id = likes.user_id
4  GROUP BY likes.user_id
5  HAVING total_likes_per_user = (SELECT COUNT(*) FROM photos);
6
```

Result Grid | Filter Rows:

user_id	username	total_likes_per_user
5	Aniya_Hackett	257
14	Jadyn81	257
21	Rocio33	257
24	Maxwell.Halvorson	257
36	Ollie_Ledner37	257
41	Mckenna17	257
54	Duane60	257
57	Julien_Schmidt	257
66	Mike.Auer39	257
71	Nia_Haag	257
75	Leslie67	257
76	Janelle.Nikolaus81	257
91	Bethany20	257

INSIGHTS GAINED

- Getting insights is the most important part to make informed decisions
- Insights gained are
  - The most loyal users of Instagram since 2016.
  - Instagram has many users who have never posted a single pic.
  - Most like photo on Instagram.
  - Most used hashtags.
  - Most users registered on Thursday and Sunday in Instagram, making it the best day to launch campaigns.
  - Per week Instagram users posts about 2 to 3 photos.
  - Found the evidence of the presence of bots and fake accounts.

RESULTS

- Through this project I have gained the understanding of how data analytics process works which is database creation and analysis and the importance of SQL in data analysis.
- We can provide insights through SQL which makes the life easier.

THANK YOU