Project Report

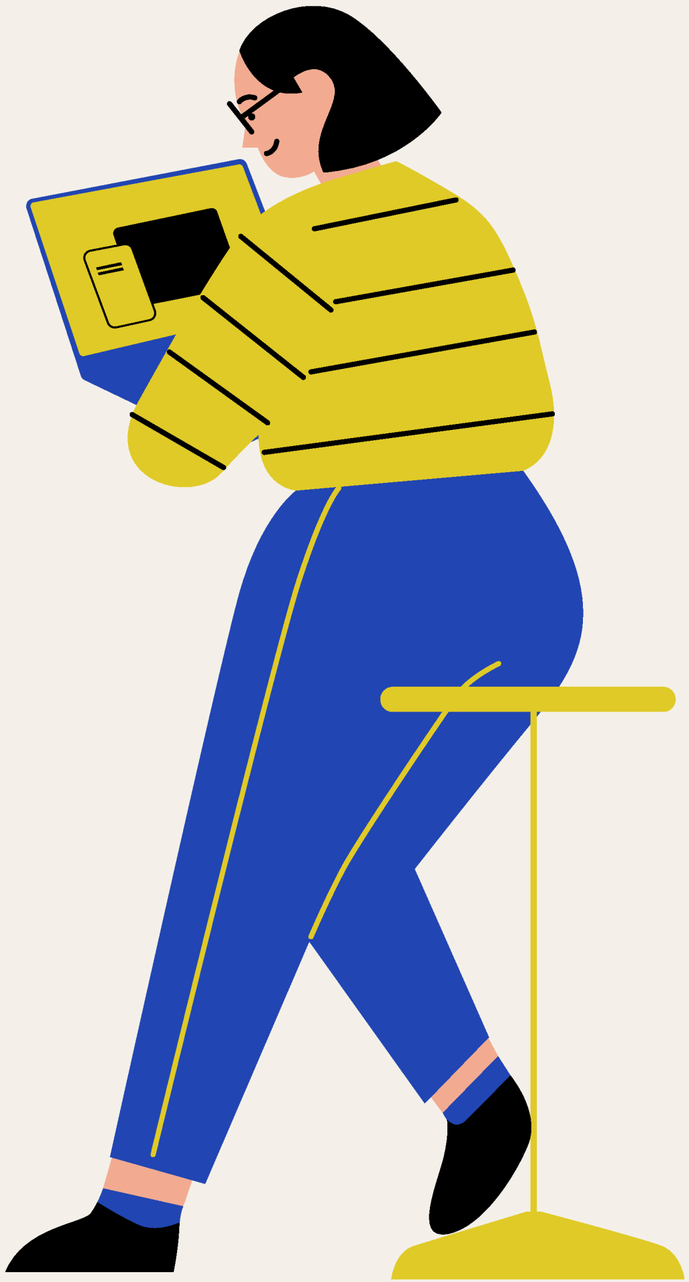
Instagram Data Analytics

Mukesh Dey

01 - Introduction

02 - Marketing Analytics

03 - Investors Metrics



Data

Analytics

01 - Introduction

Analyzing data enables informed decision-making

In this project, I'll be using SQL and MySQL Workbench as my tools to analyze Instagram user data and answer questions posted by the management team. My insights will help the product manager and the rest of the team make informed decisions about the future direction of the Instagram app.

My findings could potentially influence the future development of one of the world's most popular social media platforms.

Data

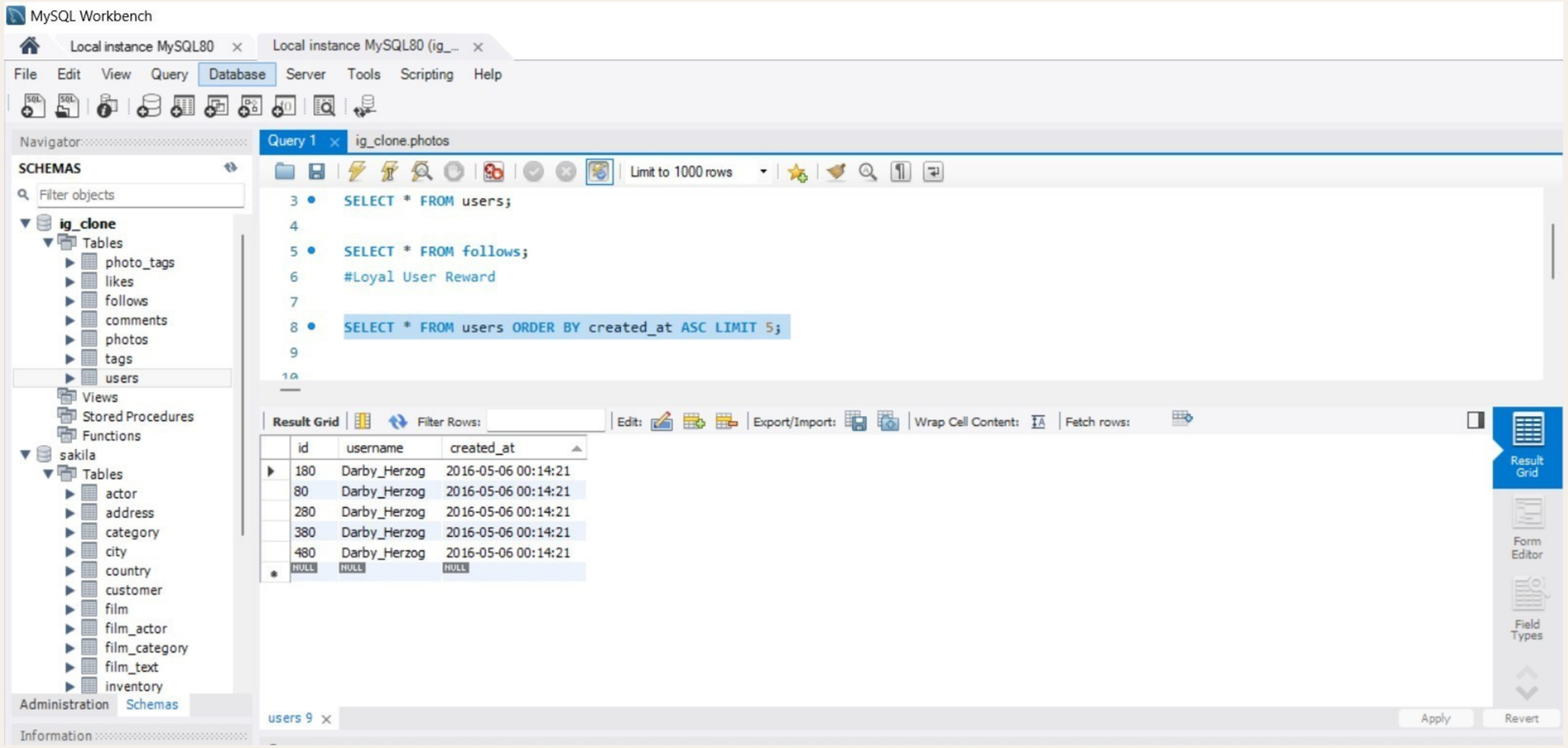
Analytics

02 - Marketing Analysis

- Loyal User Reward.
- Inactive User Engagement.
- Contest Winner Declaration.
- Hashtag Research.
- Ad Campaign Launch.

• Loyal User Reward

The marketing team wants to reward the most loyal users, i.e., those who have been using the platform for the longest time. So for that the loyal reward will be given to five oldest users on Instagram.



So, here's the top 5 oldest users on Instagram.

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Loyal User Reward

Insights

- Top 5 users Account ID: **180, 80, 280, 380, 480.**
- Here, top 5 accounts which are created are with the same user name i.e. **Darby_Herzog**
- Account Creation time & date also are the same for 5 of the accounts id i.e. **2016-05-06 00:14:21.** The user created all the 5 accounts at the same time with different id but with same user_name.

Data

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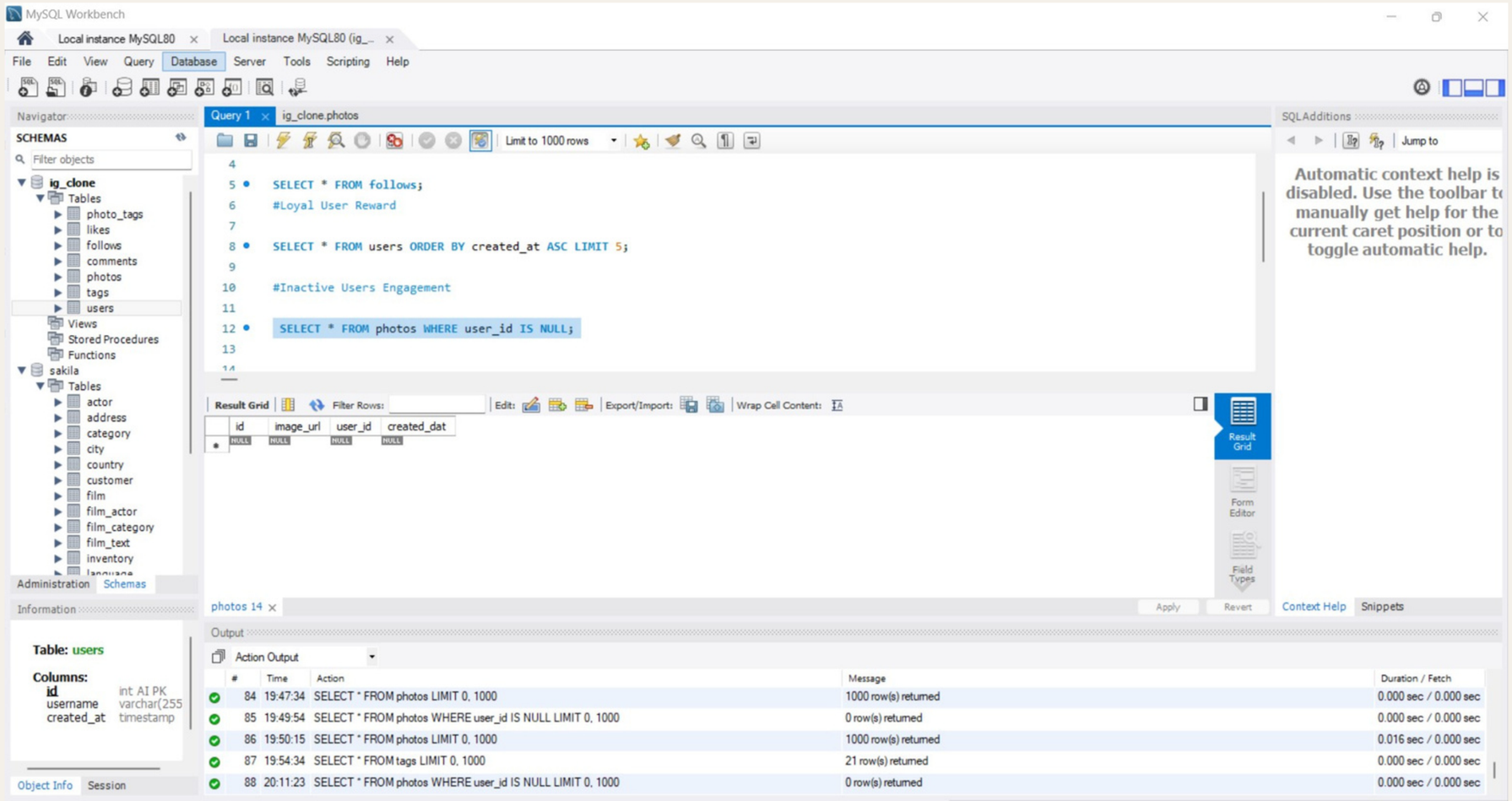
• Inactive User Engagement

The team wants to encourage inactive users to start posting by sending them promotional emails. So, here's the users who have never posted a single photo on Instagram.



But, there's no user without a single photo posted on Instagram

Data

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- # Inactive User Engagement

Insights

Based upon my observation from the database it has been observed that there are no inactive users in the Instagram Platform. So, team doesn't require to send any promotional email as all are the active users present here. For that reason only when SQL Query is run it shows **"NULL" value.**

Data

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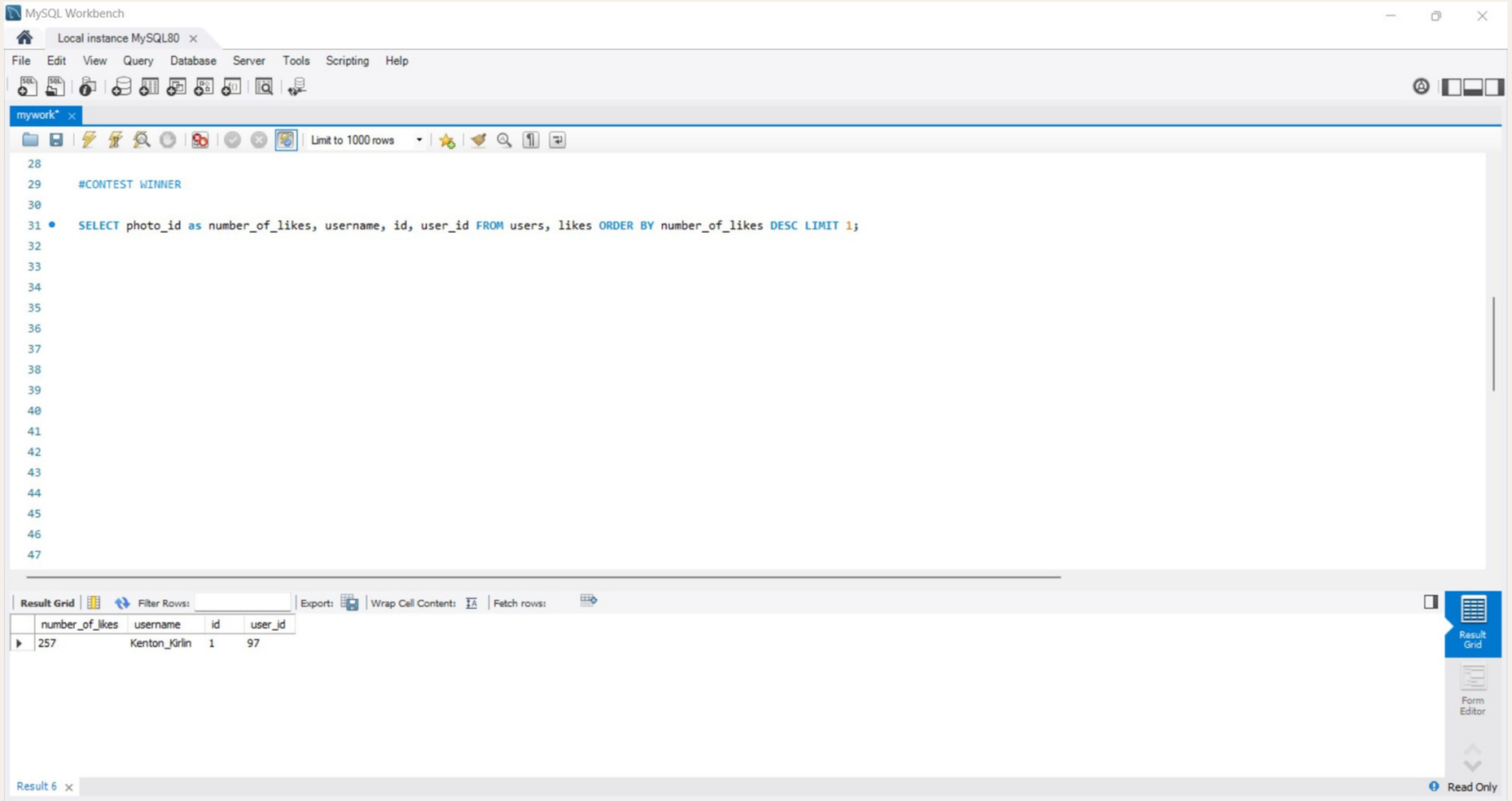
• Contest Winner Declaration

The team has organized a contest where the user with the most likes on a single photo wins. So, I have to determine the winner of the contest and provide their details to the team.



Here's the user with most no. of likes in a single photo.

Data

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Contest Winner Declaration

Insights

Winner of the contest with most number of likes here is:

- Username: Kenton_Kirlin
- Account ID: 1
- Total no. of likes in single post : 257

So, here the winner for most no. of likes in a single photo i.e. **Kenton Kirlin.**

Data

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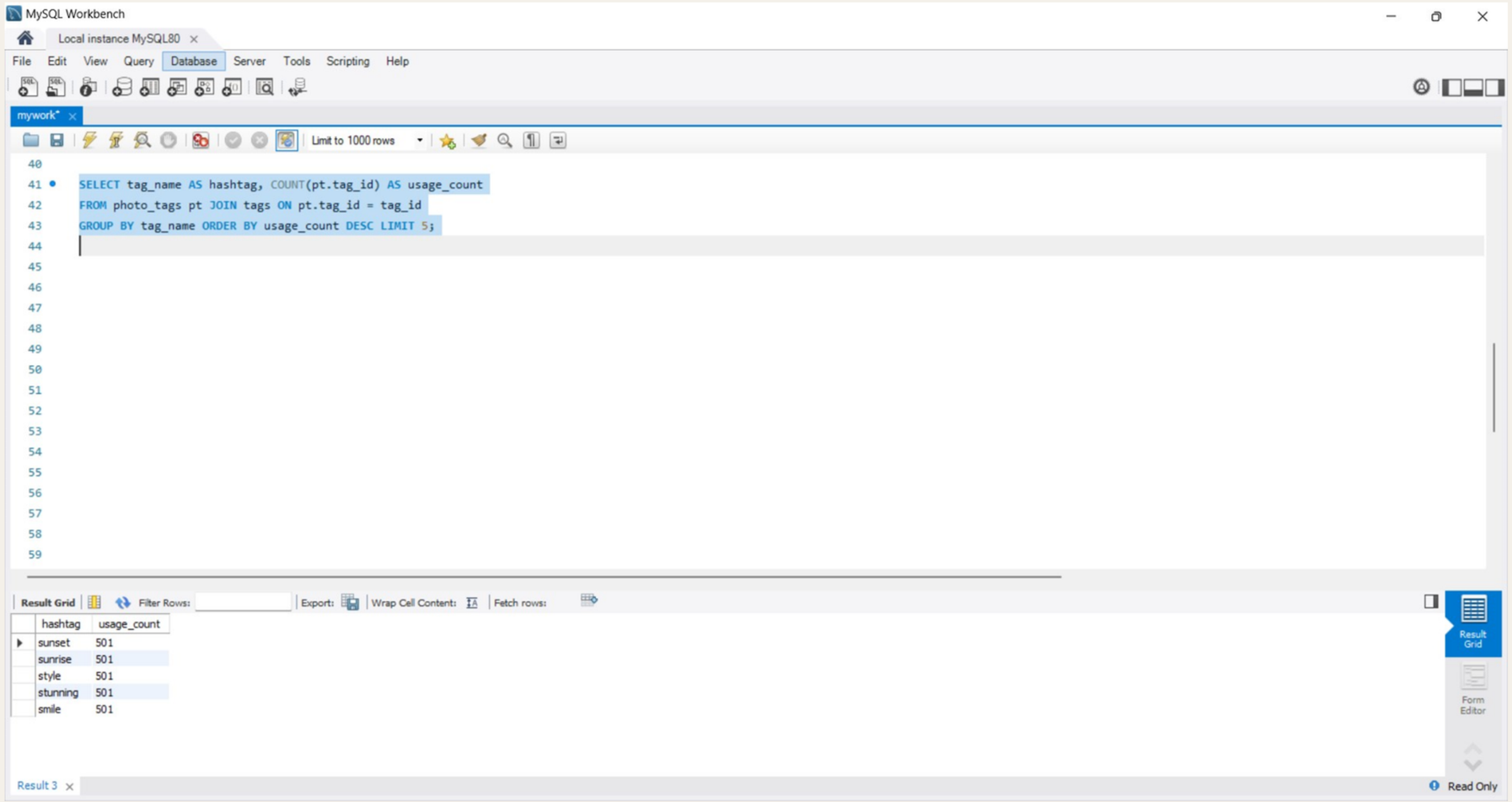
• Hashtag Research

A partner brand wants to know the most popular hashtags to use in their posts to reach the most people. So, team want to know the top five most commonly used hashtags on the platform.



Here's the top five most used hashtags on the Instagram.

Data

Analytics

- # Hashtag Research

Insights

The SQL Query used to find the top five hashtag which are used for the post is mentioned in the screenshot in previous slide.

The top five #hashtags which where used mainly are:

- **Sunset**
- **Sunrise**
- **Style**
- **Stunning**
- **Smile**

All the #hashtags where used for same number of times i.e. 501 times.

Data

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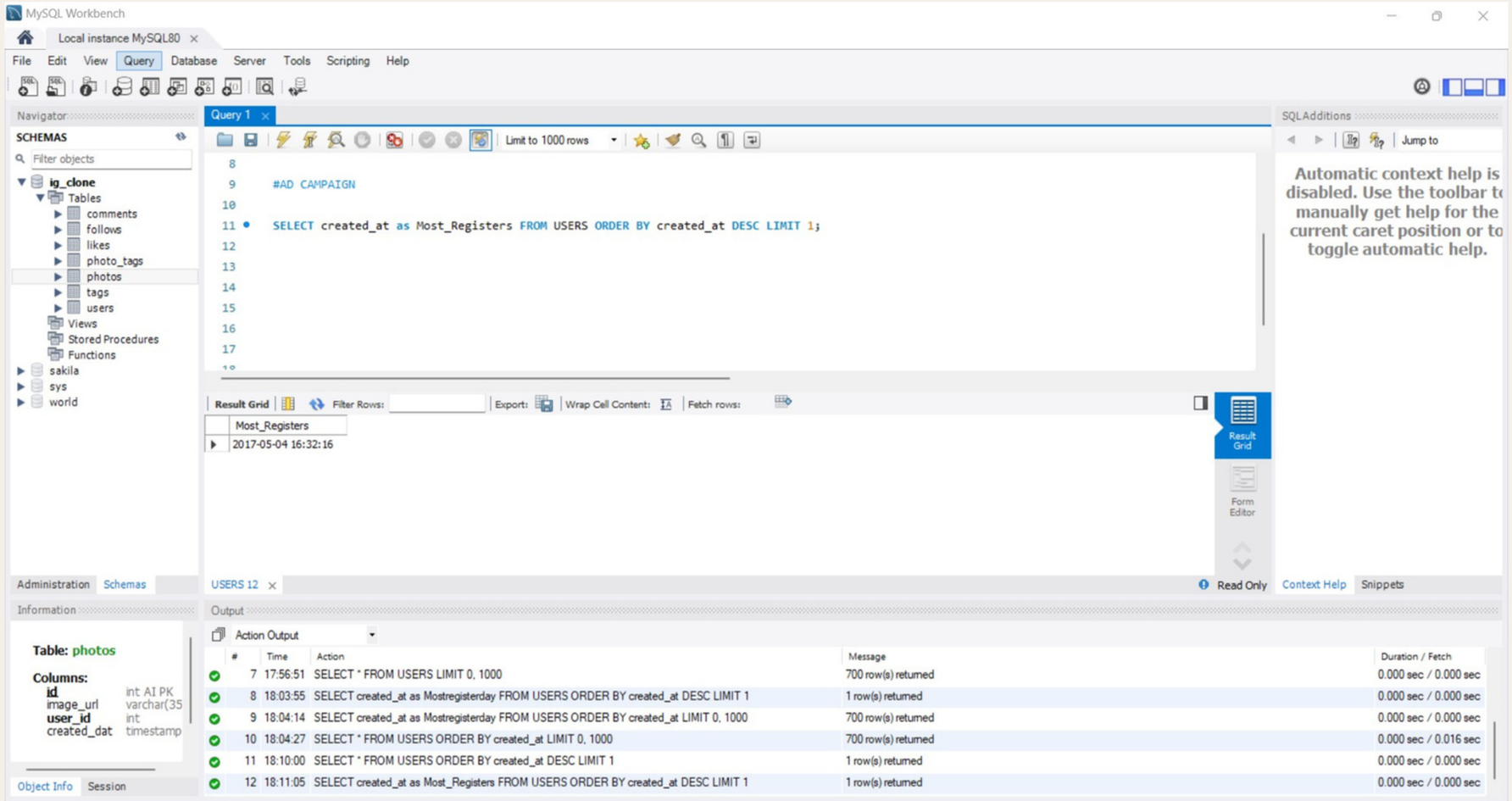
• Ad Campaign Launch

The team wants to know the best day of the week to launch ads. So. they wants to know the day of the week when most users register on Instagram for scheduling the ad campaign.



The day on which most number of users registered on the Instagram.

Data

Analytics

- Ad Campaign Launch

Insights

The SQL Query to find the week of the day when most of the users registered is mentioned in the previous slide screenshot.
The day of the week when most users registered is **2017-05-04 16:32:16.**
Ad Campaign by the team can be scheduled in the given date so that more users can be engaged with that campaign.

Data

Analytics

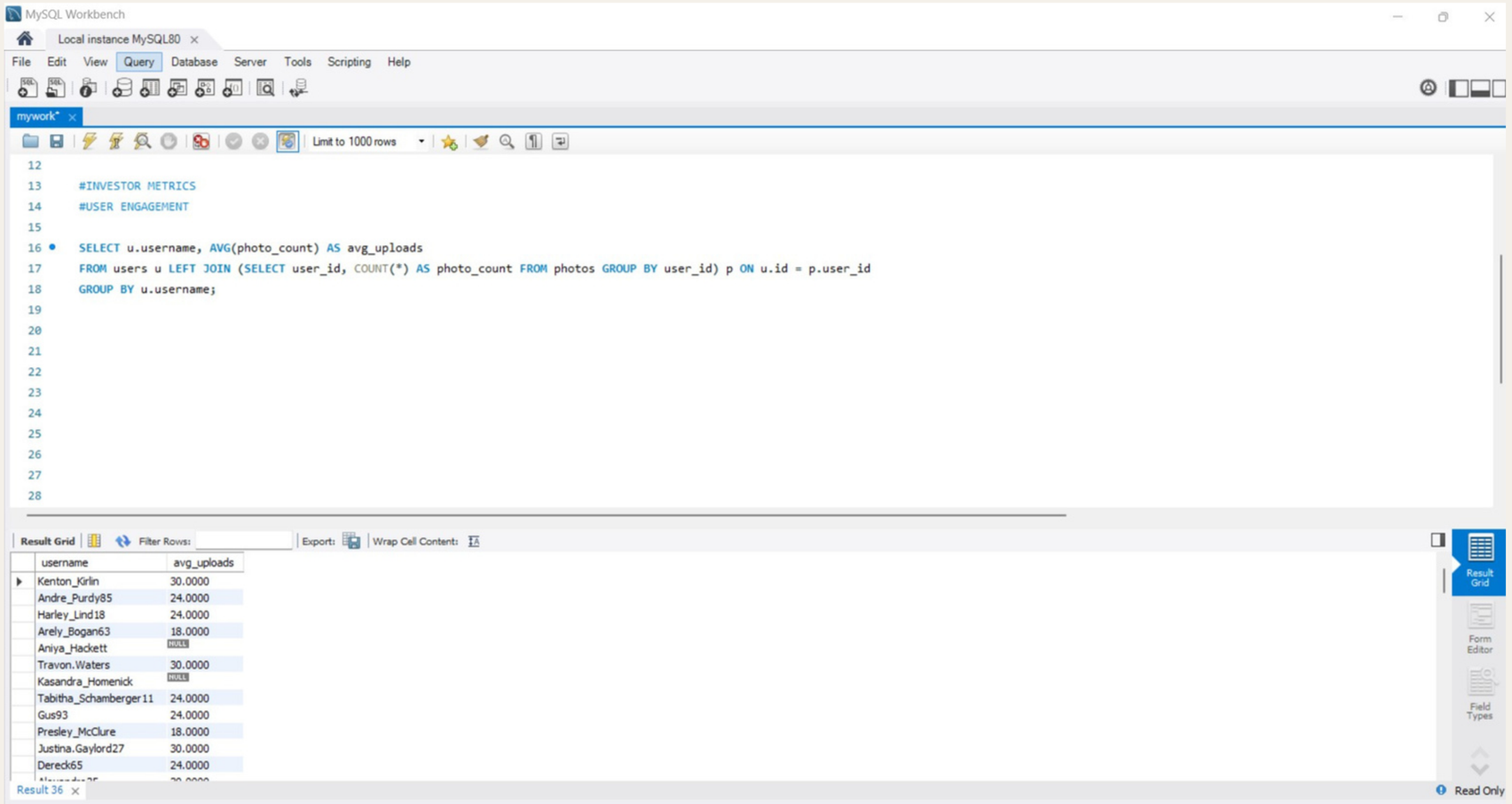
03 - Investor Metrics

- User Engagement.
- Bots & Fake Accounts.

Data analysis allows for identifying trends and patterns within datasets.

• User Engagement

Investors want to know if users are still active and posting on Instagram or if they are making fewer posts. So they wants me to calculate the average number of posts per user on Instagram and also to provide the total number of photos on Instagram divided by the total number of users.



Here's the average number of posts per user on Instagram

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- User Engagement

Insights

The SQL Query to calculate the average number of posts per user on Instagram is given in the screenshot of previous slide.
The average number of uploads per user is mentioned herein which ranges between 6 to 72 posts per user which varies user-to-user.

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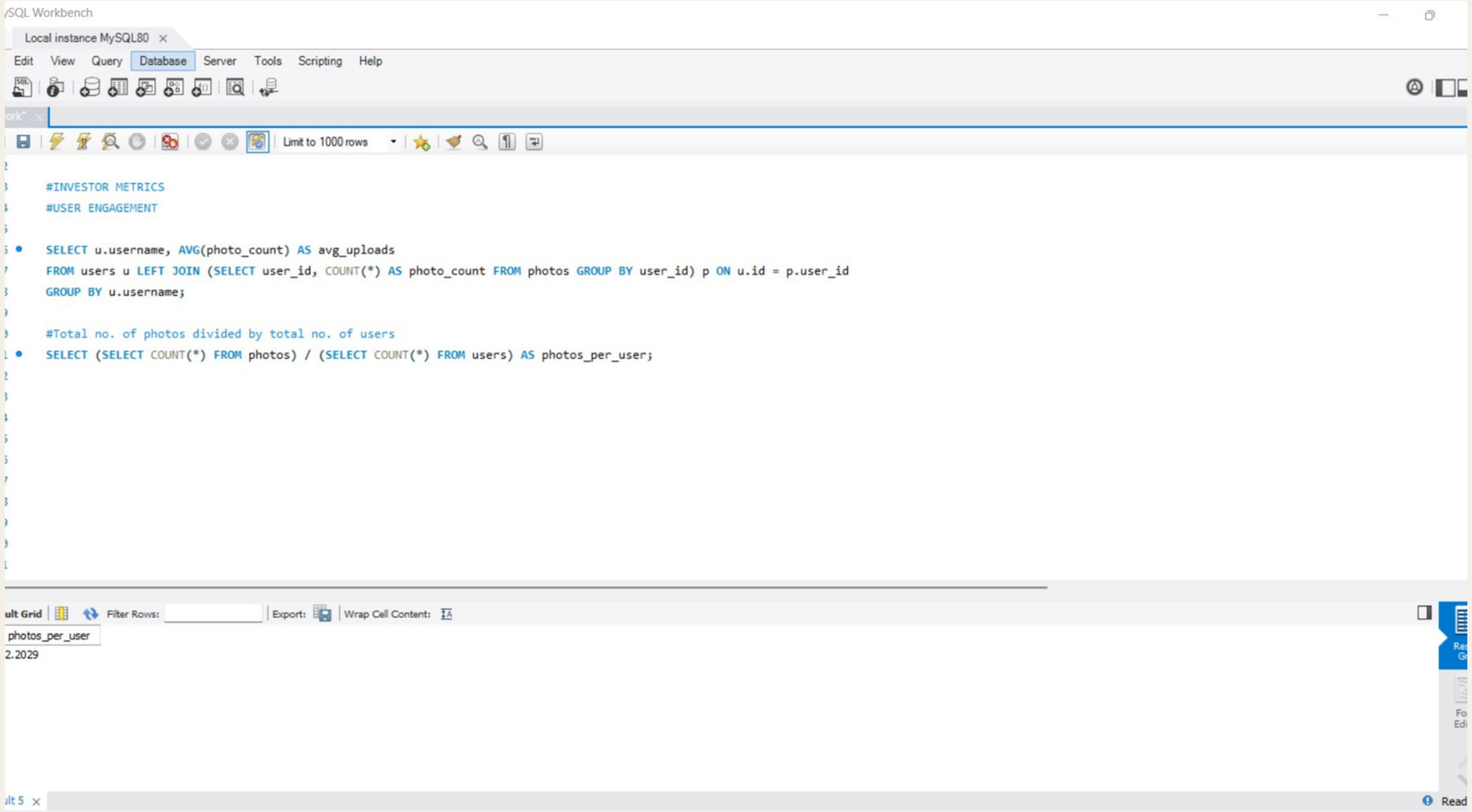
• User Engagement



Here's the total number of photos on Instagram divided by the total number of users.

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- # User Engagement

Insights

The SQL Query to calculate the total number of photos divided by total number of users on Instagram is given in the screenshot of previous slide to find the photos per user.

The number of photos per user is **2.2029**.

Data

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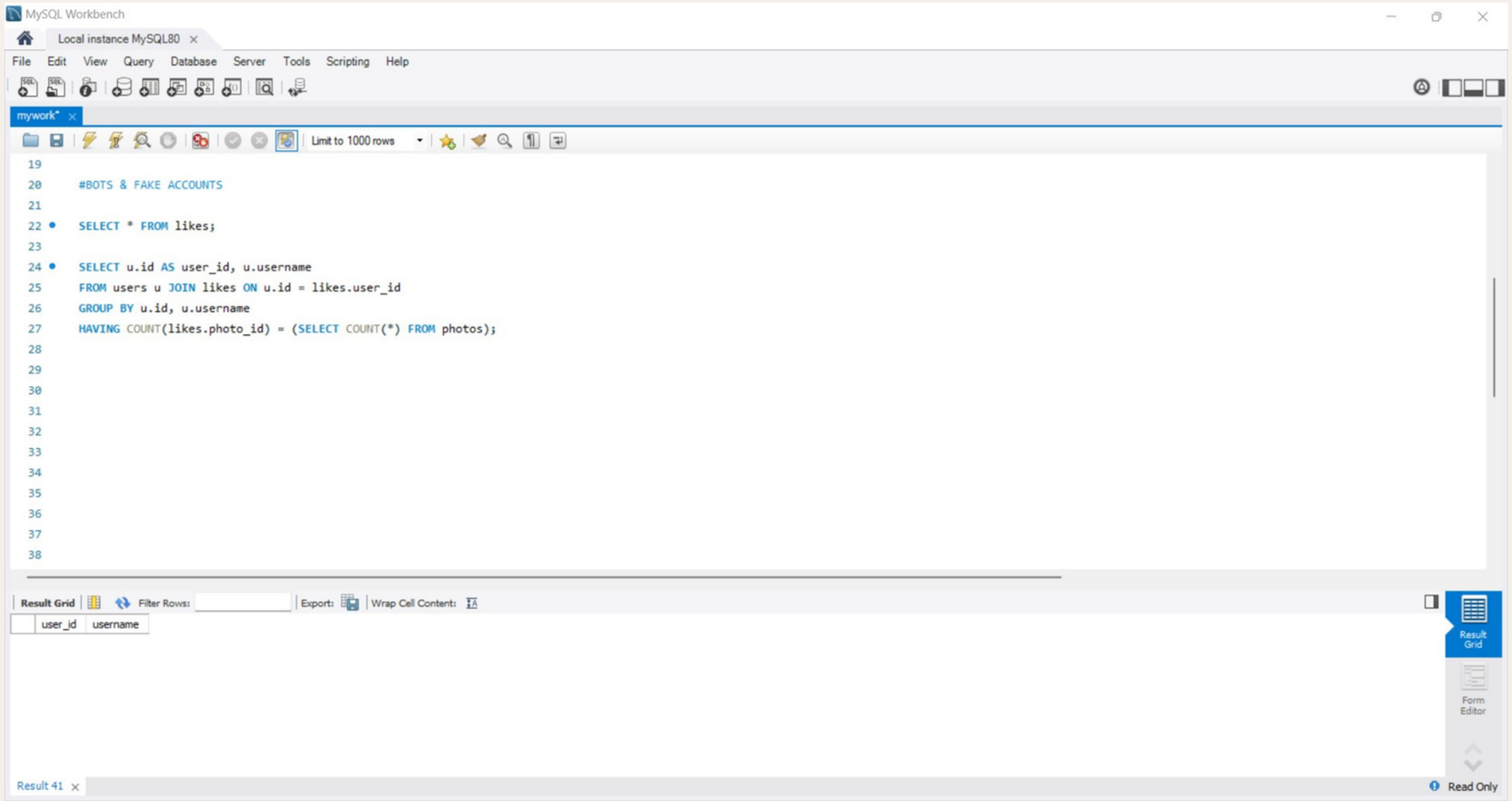
• Bots & Fake Accounts

Investors want to know if the platform is crowded with fake and dummy accounts. So, wants me to identify users (potential bots) who have liked every single photo on the site, as this is not typically possible for a normal user.



Here's the output for bots & fake accounts. As all the users are genuine so the output is blank.

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- # Bots & Fake Accounts

Insights

The SQL Query to find where fake & dummy accounts are present in the platform is given in the screenshot in previous slide.
After running the query there is no output is been displayed in user_id and username column.
By which we can conclude that there is no fake & dummy accounts in the platform i.e. all the accounts are of real users.

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Data

Analytics

Thanks

Mukesh Dey