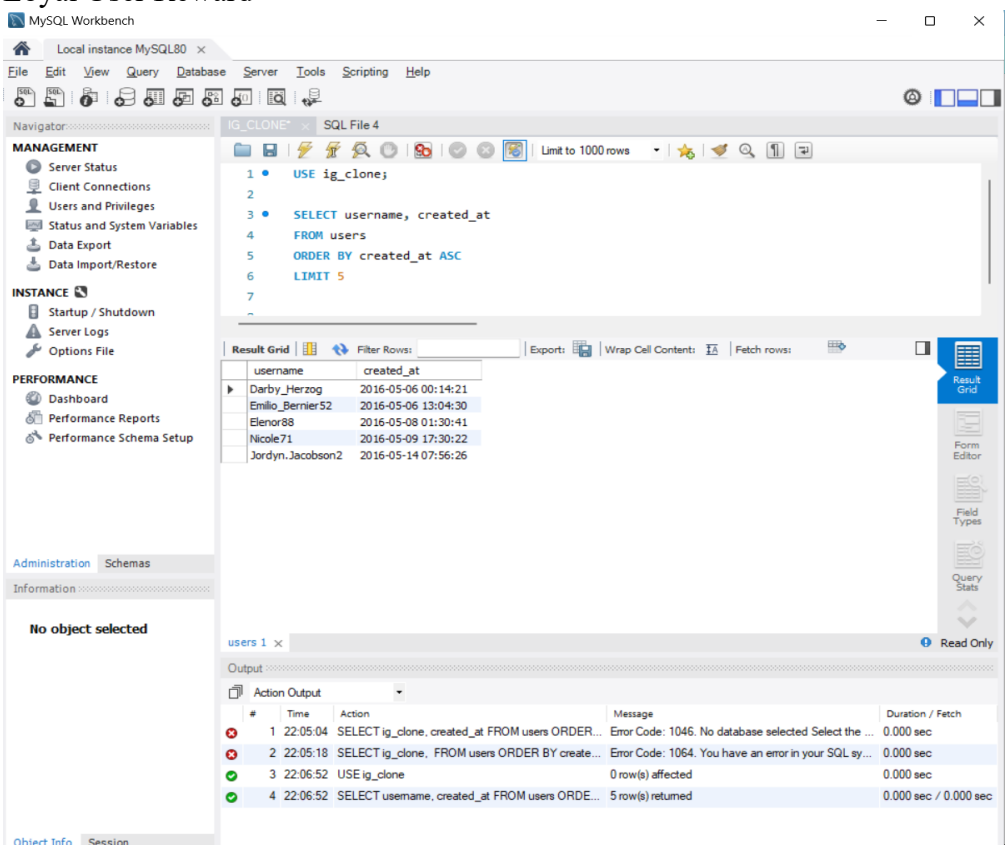
Instagram User Analytics

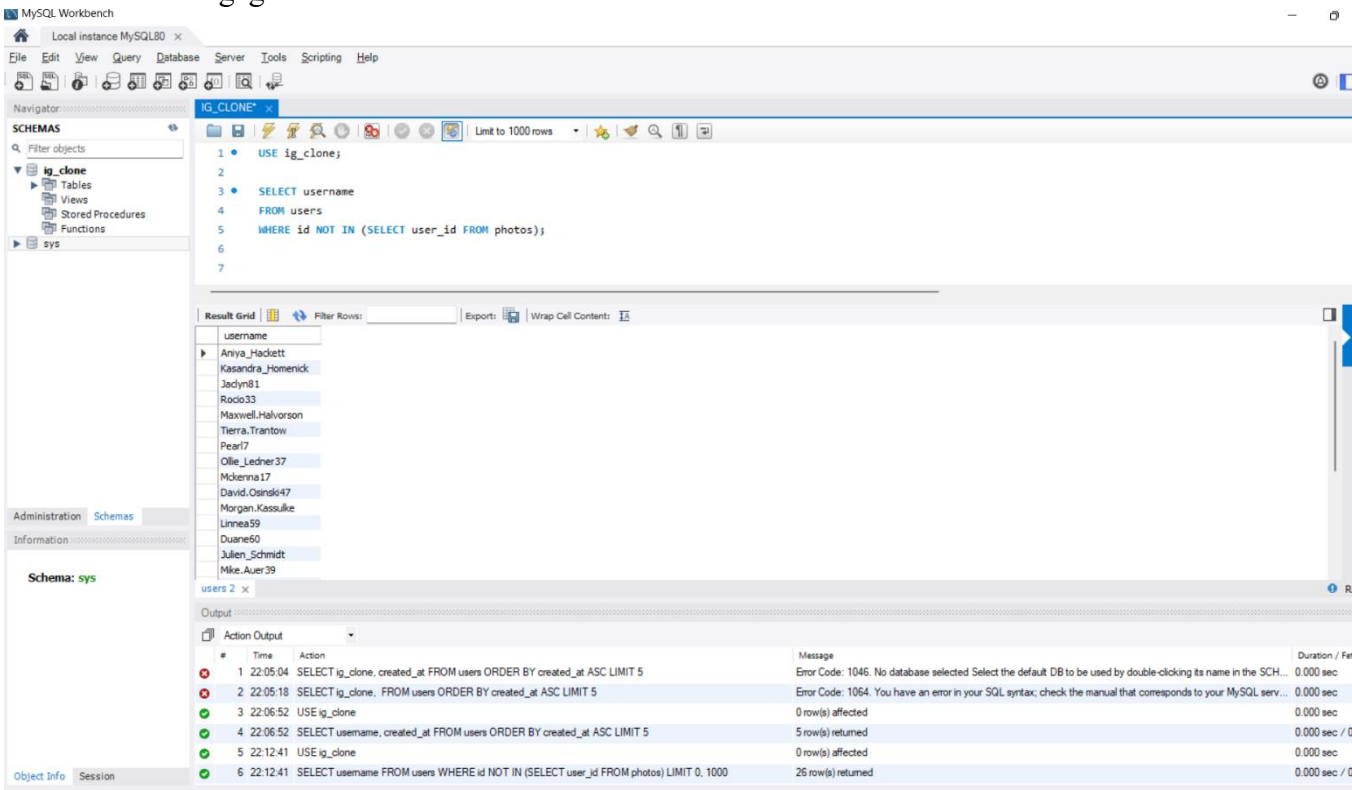
- Project Overview
  - The purpose of this project is to analyse the data from an Instagram clone database to derive insights for marketing strategies and investor metrics. The database contains tables for users, photos, comments, likes, follows, tags, and their relationships. Through SQL queries, we aim to address various tasks such as identifying loyal users, engaging inactive users, declaring contest winners, researching hashtags, and determining the best time for ad campaigns.

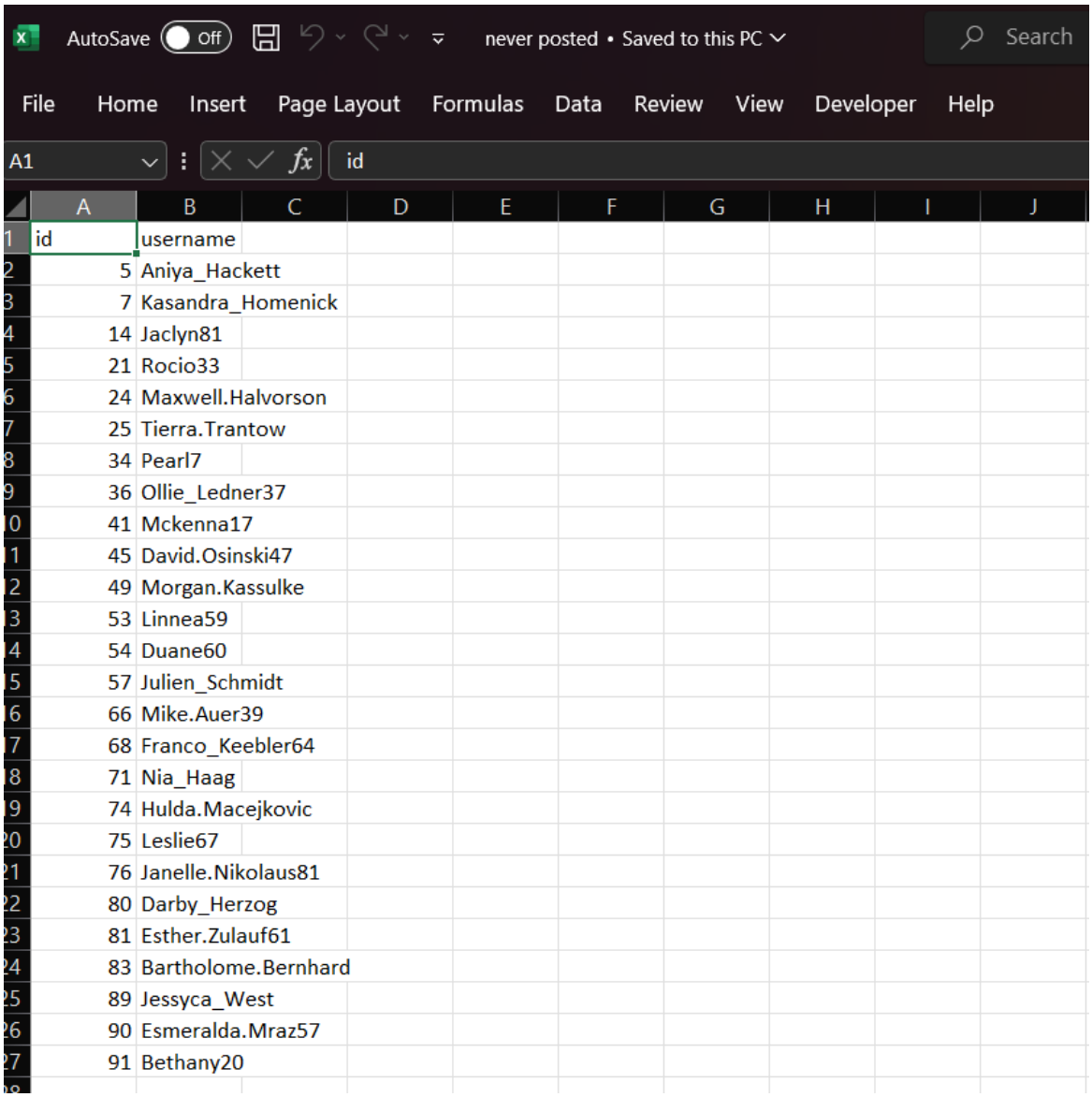
- Approach
  - Database Setup: The provided SQL commands were executed to create the necessary tables and relationships in MySQL Workbench.
  - Data Analysis: SQL queries were formulated to address each task mentioned in the project description.
  - Results Interpretation: The outputs of the SQL queries were analysed to derive meaningful insights.
  - Report Preparation: A report was compiled in PDF format, documenting the project overview, approach, tech-stack used, insights gained, and results.

- Tech-Stack Used
  - Software: MySQL Workbench
  - Version: 8.0
  - Reason for Choice: MySQL Workbench is a robust tool for managing MySQL databases, offering features for query development, database design, and administration. It provides a user-friendly interface for writing SQL queries and visualizing data, making it suitable for this project.
- Marketing Analysis
  - Loyal User Reward

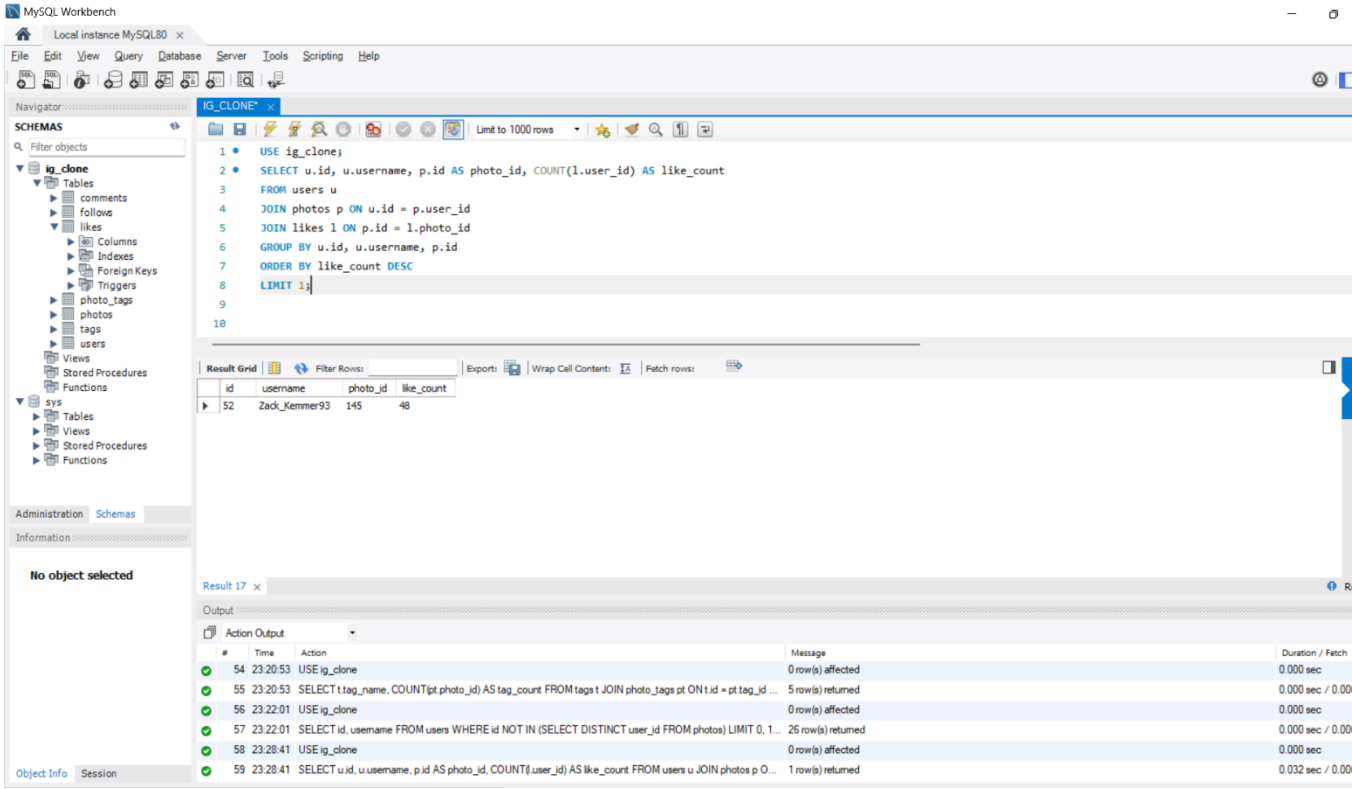


- Inactive User Engagement

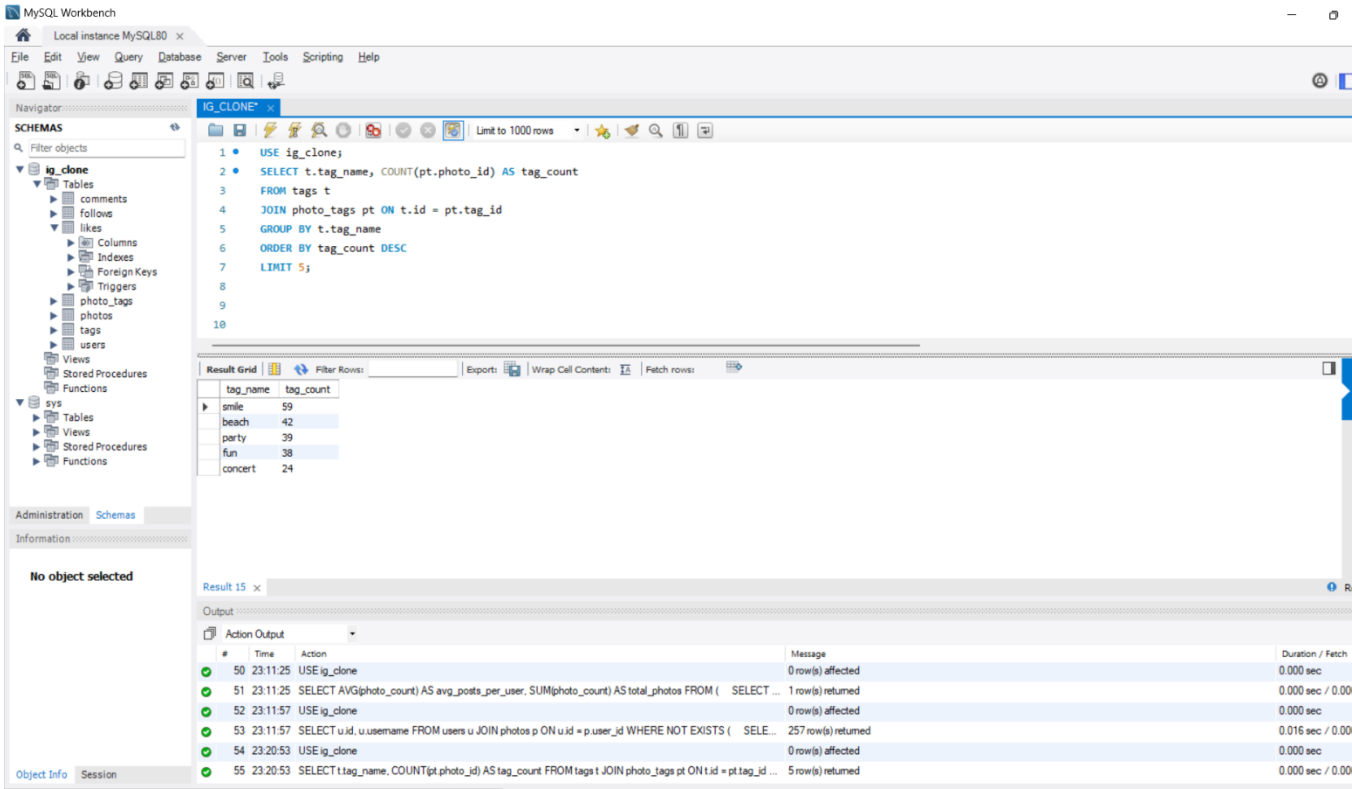




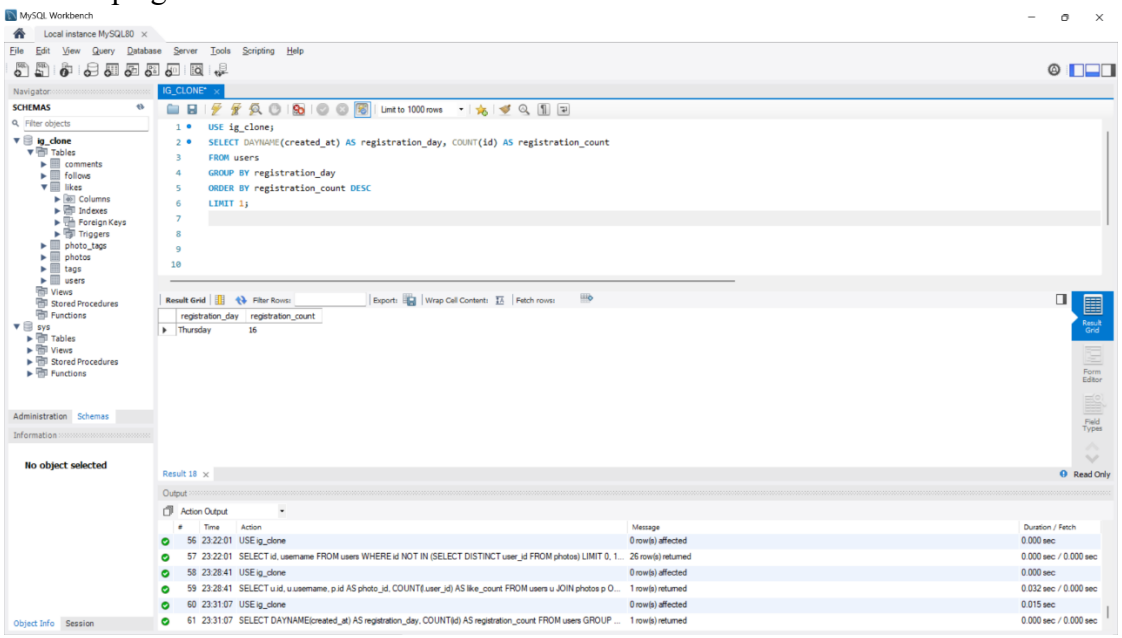
- Contest Winner Declaration



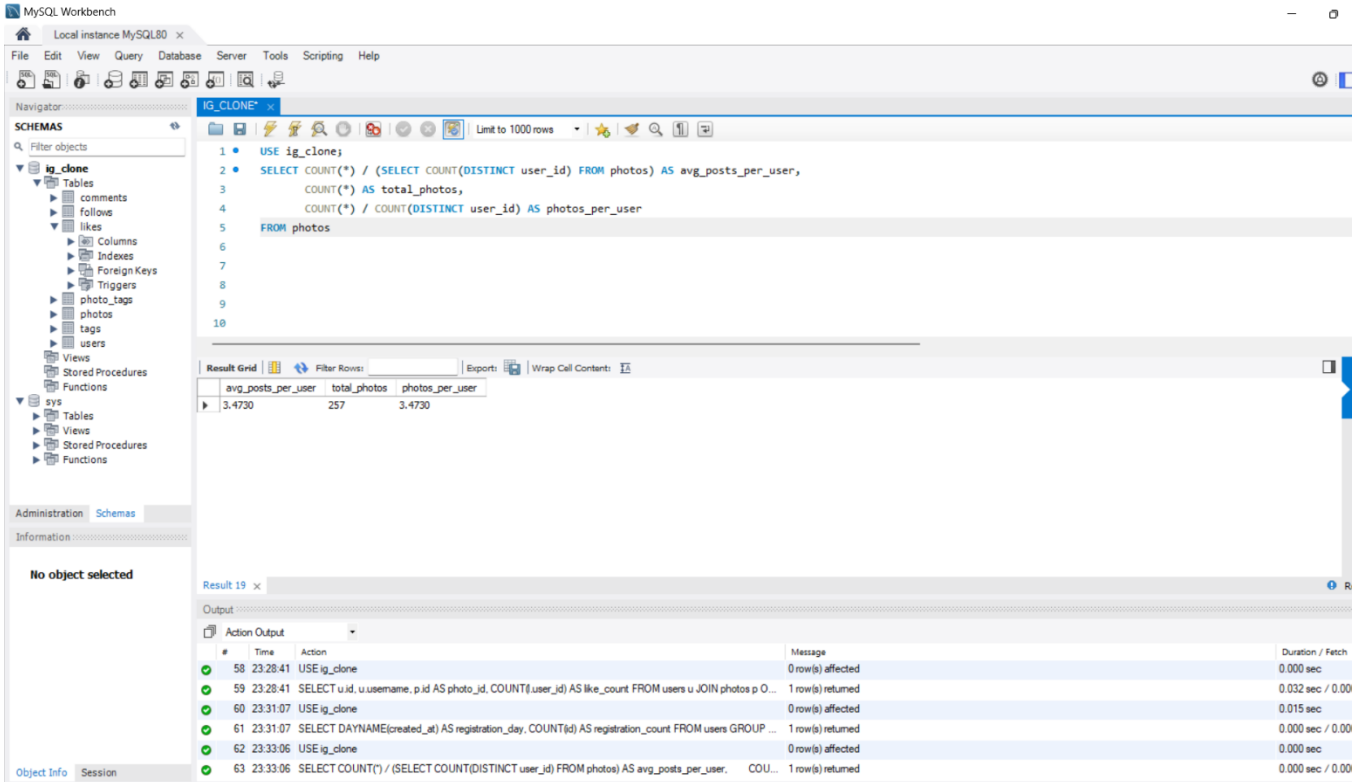
- Hashtag Research:



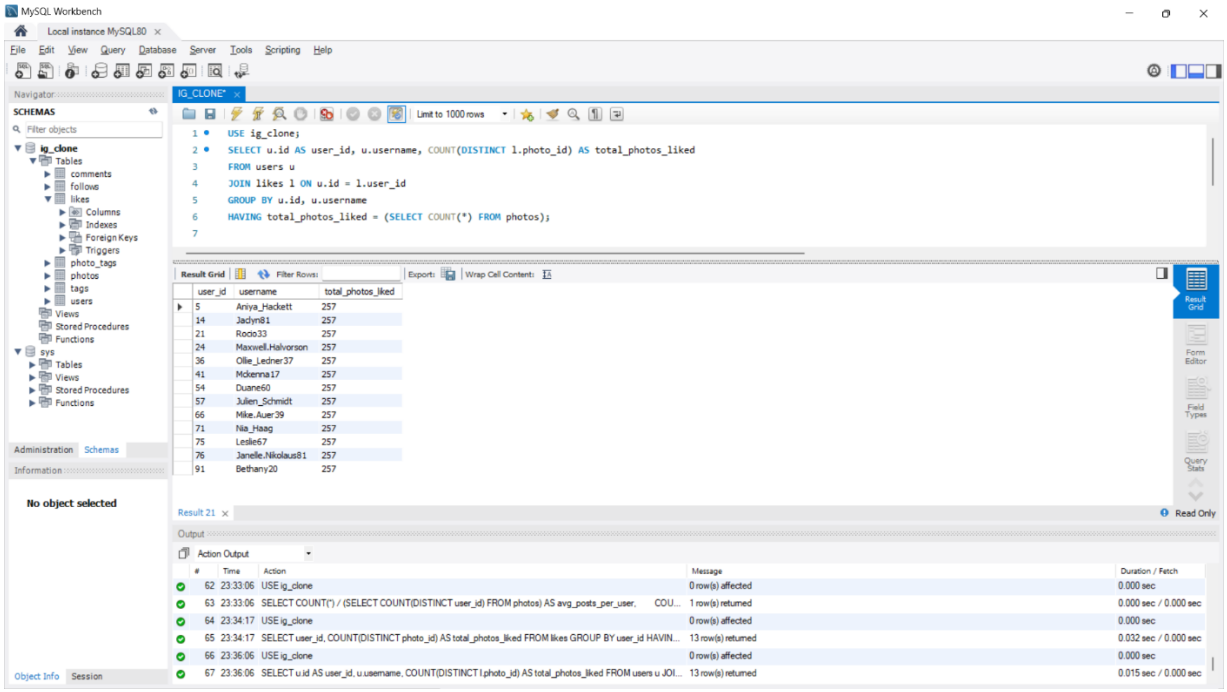
- Ad Campaign Launch



- Investor Metrics
  - User Engagement:
  - Calculated the average number of posts per user on Instagram.
  - Provided the total number of photos on Instagram divided by the total number of users.
  - Investors can gauge user activity and engagement.



- **Bots & Fake Accounts**:
  - Identified users (potential bots) who have liked every single photo on the site.
  - This behaviour is not typical for a normal user and may indicate fake accounts.



- Insights
  - Loyal User Reward: Identified the five oldest users on Instagram based on their registration dates. This insight can help in rewarding loyal users who have been using the platform for a long time.
  - Inactive User Engagement: Identified users who have never posted a single photo on Instagram, allowing targeted efforts to encourage them to start posting.
  - Contest Winner Declaration: Determined the winner of a contest based on the most likes on a single photo. This information can be used to declare contest winners and award prizes.
  - Hashtag Research: Identified the top five most commonly used hashtags on the platform, providing insights for effective hashtag usage in posts and campaigns.
  - Ad Campaign Launch: Determined the best day of the week to launch ad campaigns based on user registration trends. This insight can optimize ad campaign scheduling for maximum reach and engagement.

- Results
  - Successfully analysed the Instagram clone database to derive insights for marketing strategies and investor metrics.
  - Identified key patterns and trends in user behaviour, engagement, and content consumption.
  - The analysis provided valuable information for decision-making and strategy formulation, potentially leading to improved user engagement, content relevance, and ad campaign effectiveness.