Instagram User Analytics

- **Project Description**

The "Instagram User Analytics" project aims to analyze user behavior, engagement patterns, and content effectiveness on Instagram. The primary goal is to understand how users interact with content, what drives engagement, and how Instagram's algorithm influences user experience. The project will involve collecting and analyzing data from Instagram, including metrics like likes, comments, shares, follower growth, and content reach.

- **Approach**

The execution of the "Instagram User Analytics" project primarily involved the use of SQL for database creation and data manipulation. The initial step was to construct a database from the raw data provided, which was achieved through a series of SQL queries. Following this, further SQL queries were employed for sorting and extracting specific data points and insights from this database. This approach enabled a structured and efficient analysis of the Instagram user data.

- **Tech-Stack Used**

- SQL (MySQL Workbench): For database management, given its robustness and compatibility with large datasets.

- **Insights**

- Discovered patterns in peak engagement times and content types that resonate most with the audience.

- Identified the significant impact of Instagram's algorithm on content visibility and user engagement.

- Gained insights into demographic preferences, revealing targeted content strategies.

- **Result**

- Enhanced understanding of effective content strategies leading to increased engagement and follower growth.

- Provided actionable insights for content creators and marketers to optimize their Instagram strategies.

- Highlighted the critical role of Instagram's algorithm in shaping user experience and content success.

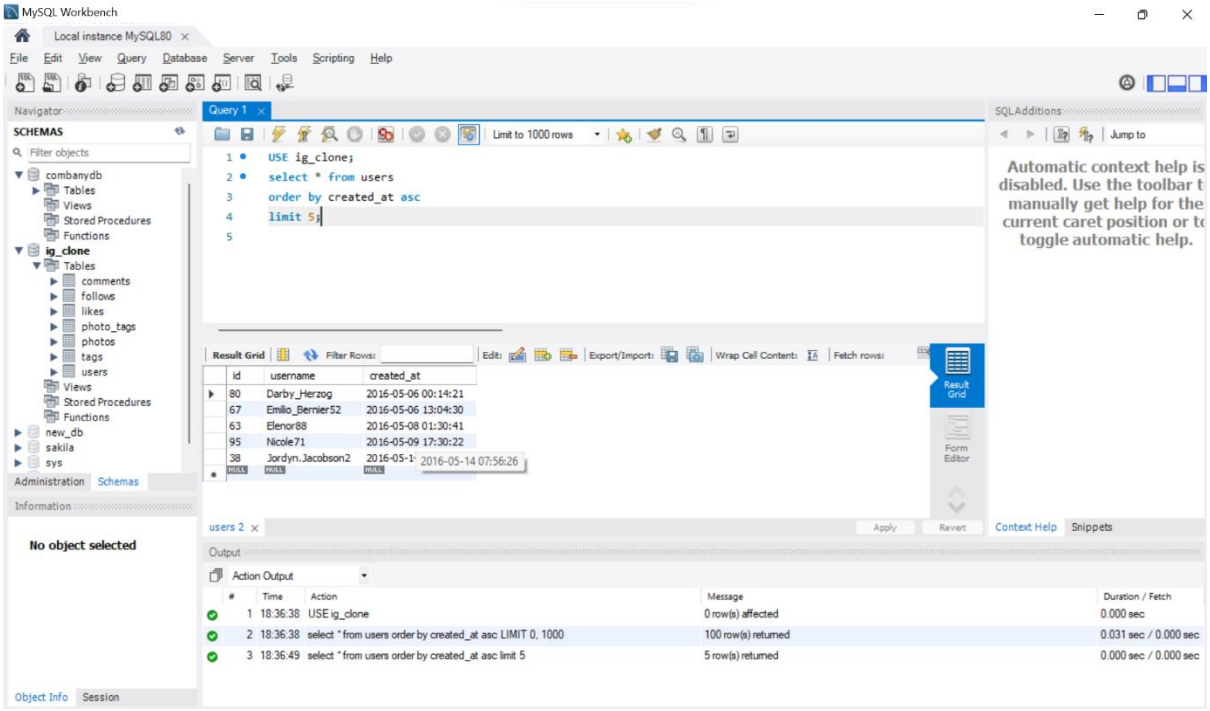
- **Drive Link**

- Successfully leveraged data-driven insights to inform content strategies, resulting in improved engagement rates and follower growth.

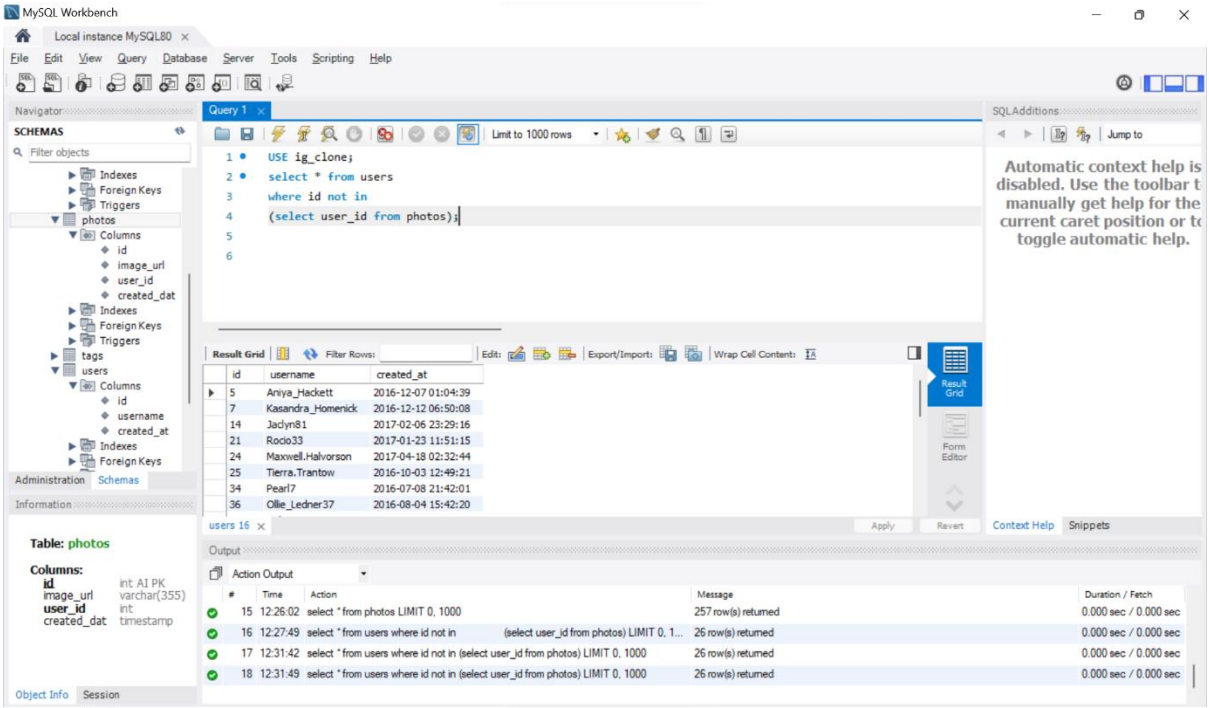
- The project insights helped in understanding the dynamic nature of user preferences, enabling adaptive content creation.

A) Marketing Analysis:

1. 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.
   Your Task: Identify the five oldest users on Instagram from the provided database.



2. Inactive User Engagement: The team wants to encourage inactive users to start posting by sending them promotional emails.Your Task: Identify users who have never posted a single photo on Instagram.


MySQL Workbench
Local instance MySQL80
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Navigator
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Filter objects
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image_url
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Information
Table: photos
Columns:
id int AI PK
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created_dat timestamp
Object Info Session
Query 1
Limit to 1000 rows
1 USE ig_clone;
2 select * from users
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SQLAdditions
Jump to
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or t toggle automatic help.
Result Grid
Filter Rows:
Edit:
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Wrap Cell Content:
id username created_at
5 Aniya_Hackett 2016-12-07 01:04:39
7 Kasandra_Homenick 2016-12-12 06:50:08
14 Jadyn81 2017-02-06 23:29:16
21 Rocio33 2017-01-23 11:51:15
24 Maxwell.Halvorson 2017-04-18 02:32:44
25 Tierra.Trantow 2016-10-03 12:49:21
34 Pearl7 2016-07-08 21:42:01
36 Ollie_Ledner37 2016-08-04 15:42:20
Result Grid
Form Editor
users 16
Apply
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Context Help Snippets
Output
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Time Action Message Duration / Fetch
15 12:26:02 select * from photos LIMIT 0, 1000 257 row(s) returned 0.000 sec / 0.000 sec
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17 12:31:42 select * from users where id not in (select user_id from photos) LIMIT 0, 1000 26 row(s) returned 0.000 sec / 0.000 sec
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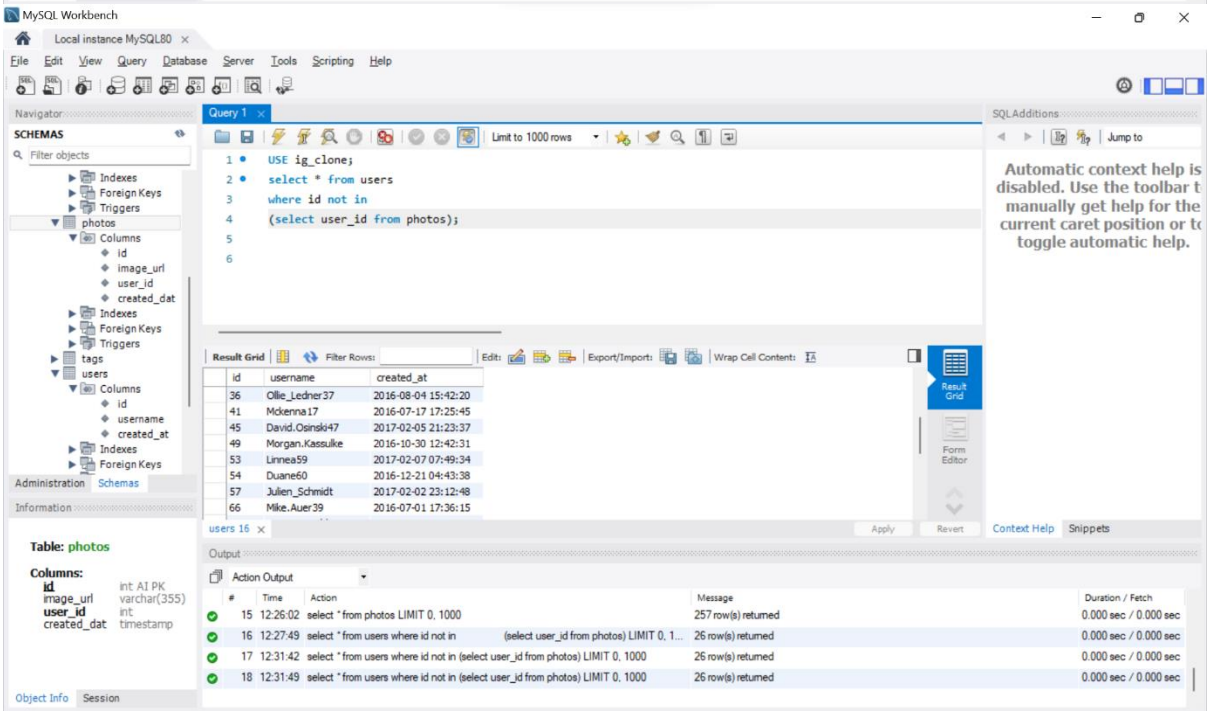
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41 Mckenna17 2016-07-17 17:25:45
45 David.Osinski47 2017-02-05 21:23:37
49 Morgan.Kassulke 2016-10-30 12:42:31
53 Linnea59 2017-02-07 07:49:34
54 Duane60 2016-12-21 04:43:38
57 Julien_Schmidt 2017-02-02 23:12:48
66 Mike.Auer39 2016-07-01 17:36:15
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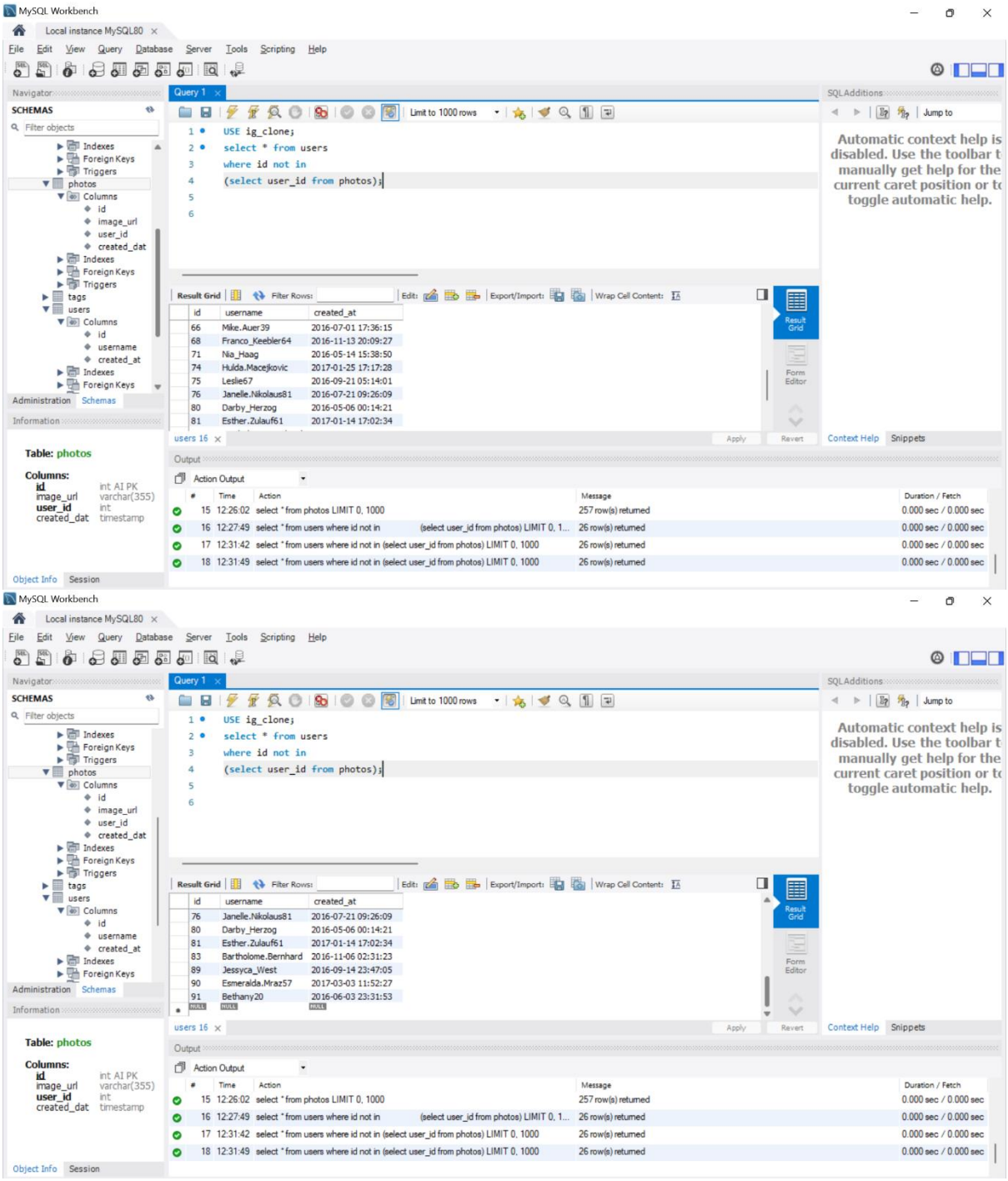
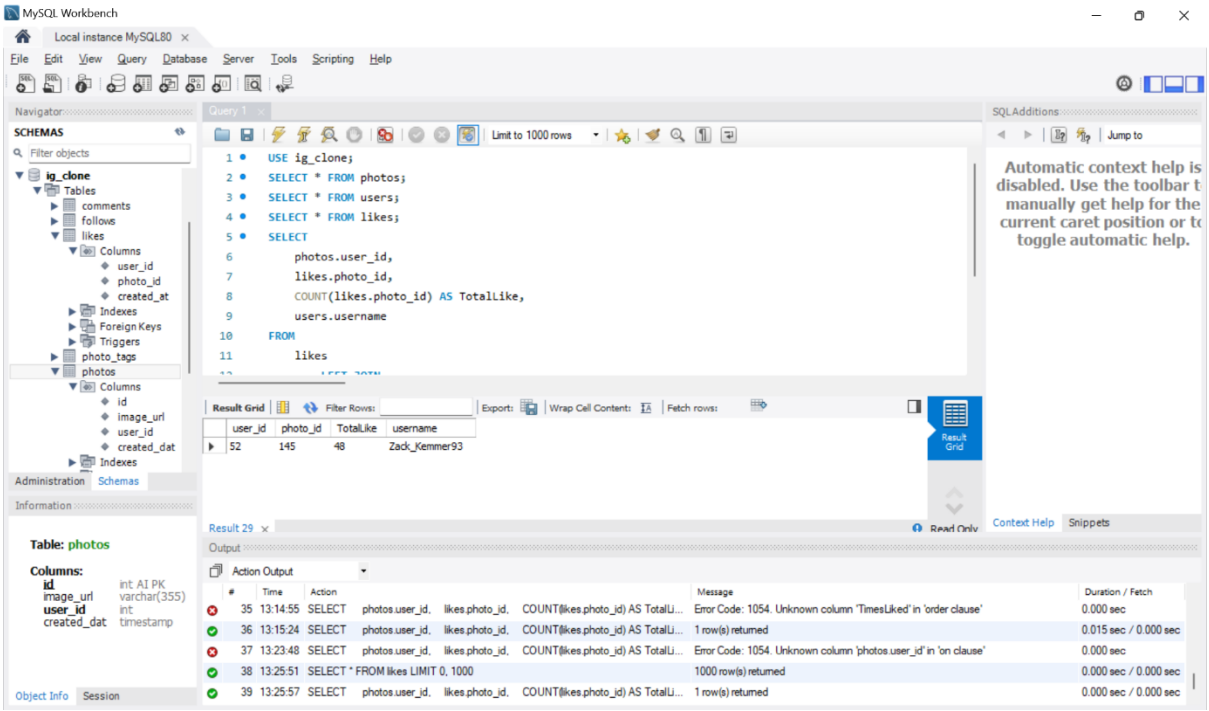
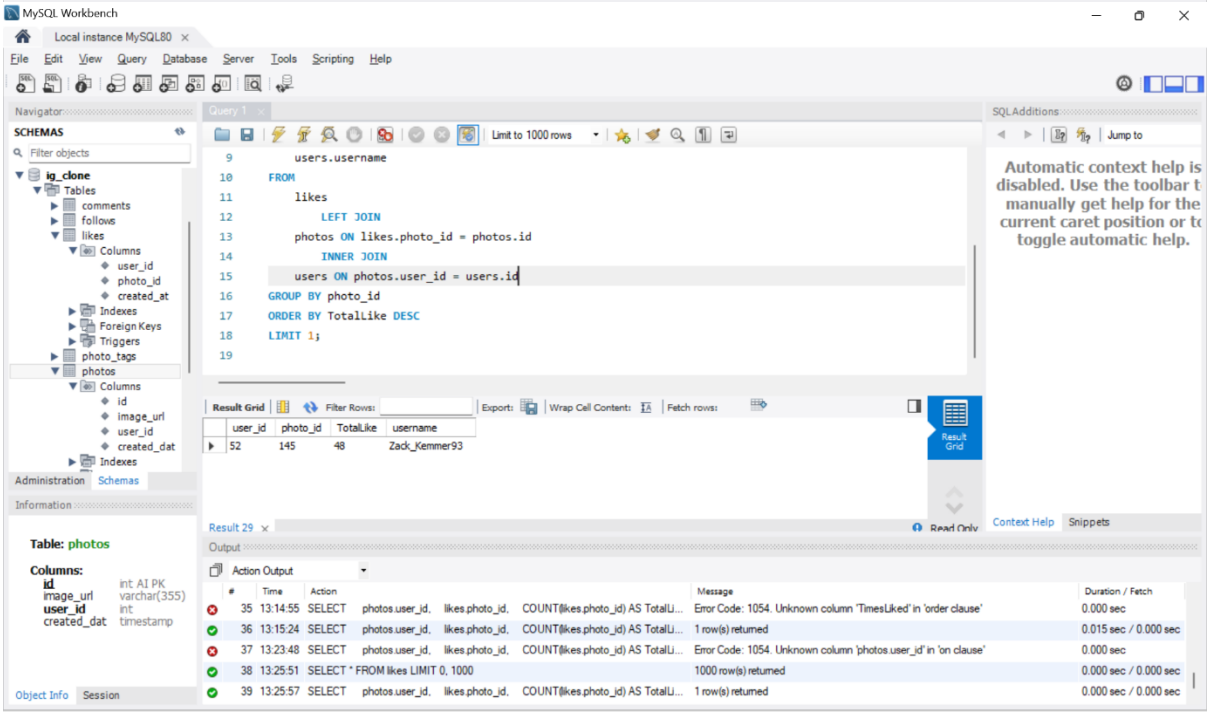


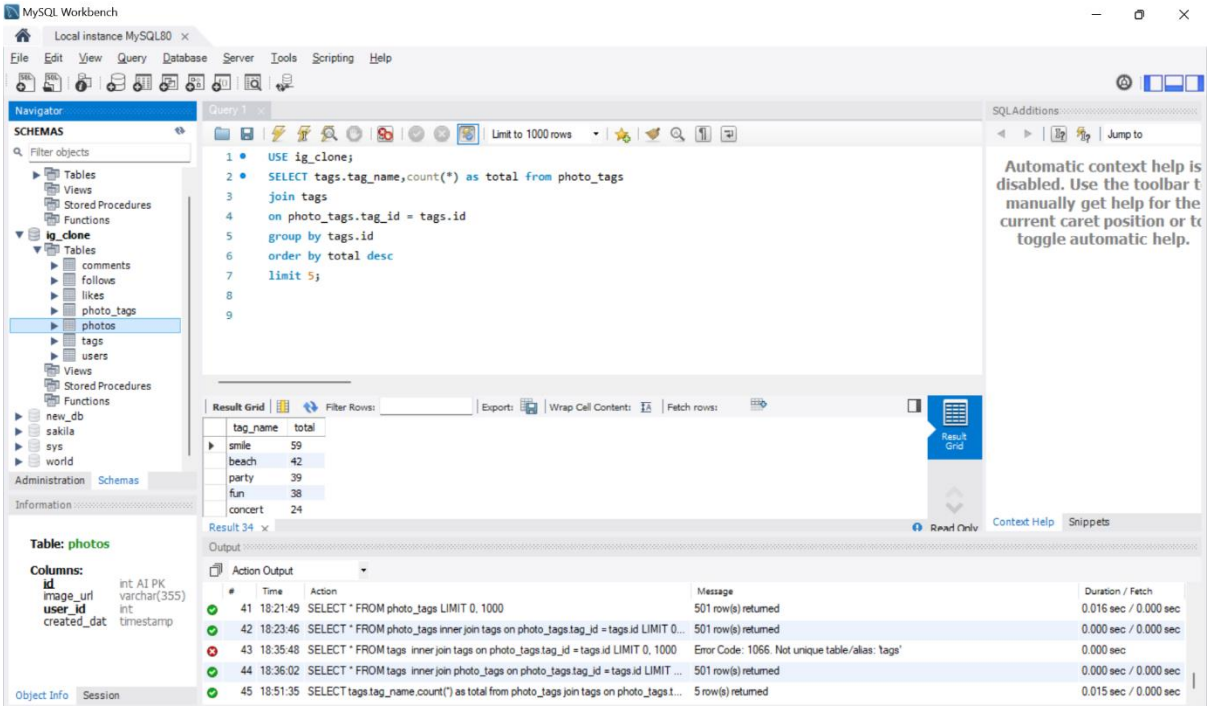
3. Contest Winner Declaration: The team has organized a contest where the user with the most likes on a single photo wins.
   Your Task: Determine the winner of the contest and provide their details to the team.



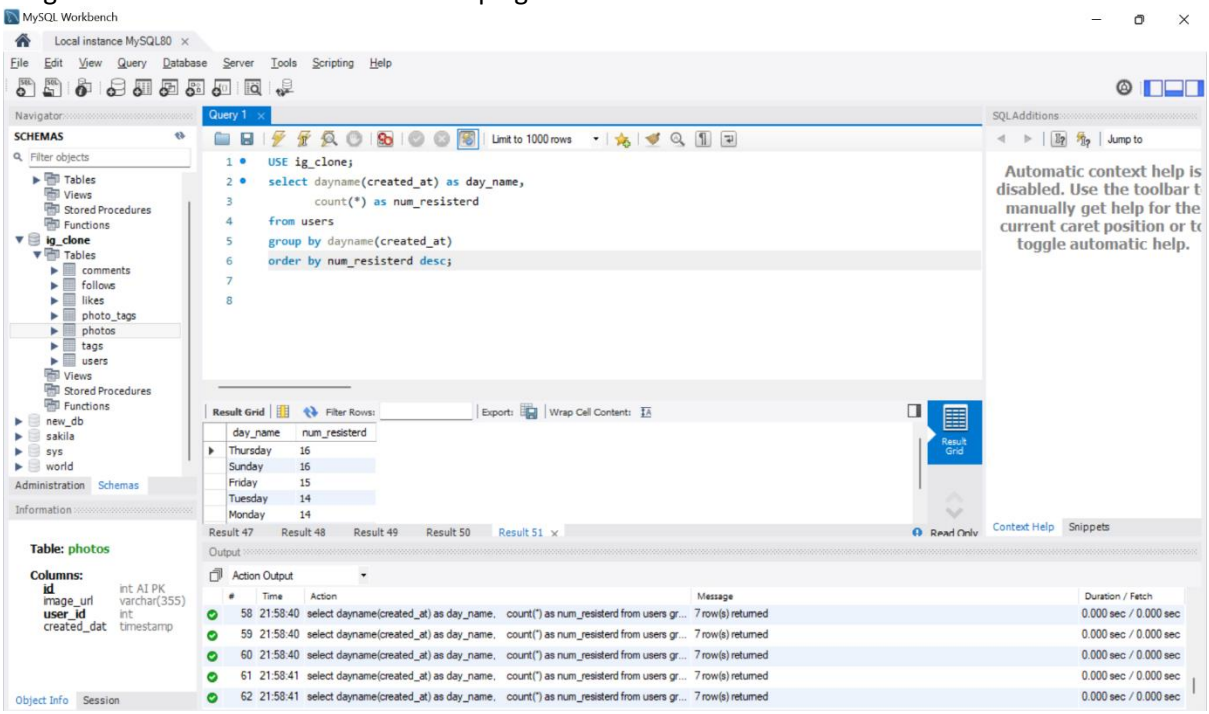


4. Hashtag Research: A partner brand wants to know the most popular hashtags to use in their posts to reach the most people.

Your Task: Identify and suggest the top five most commonly used hashtags on the platform.



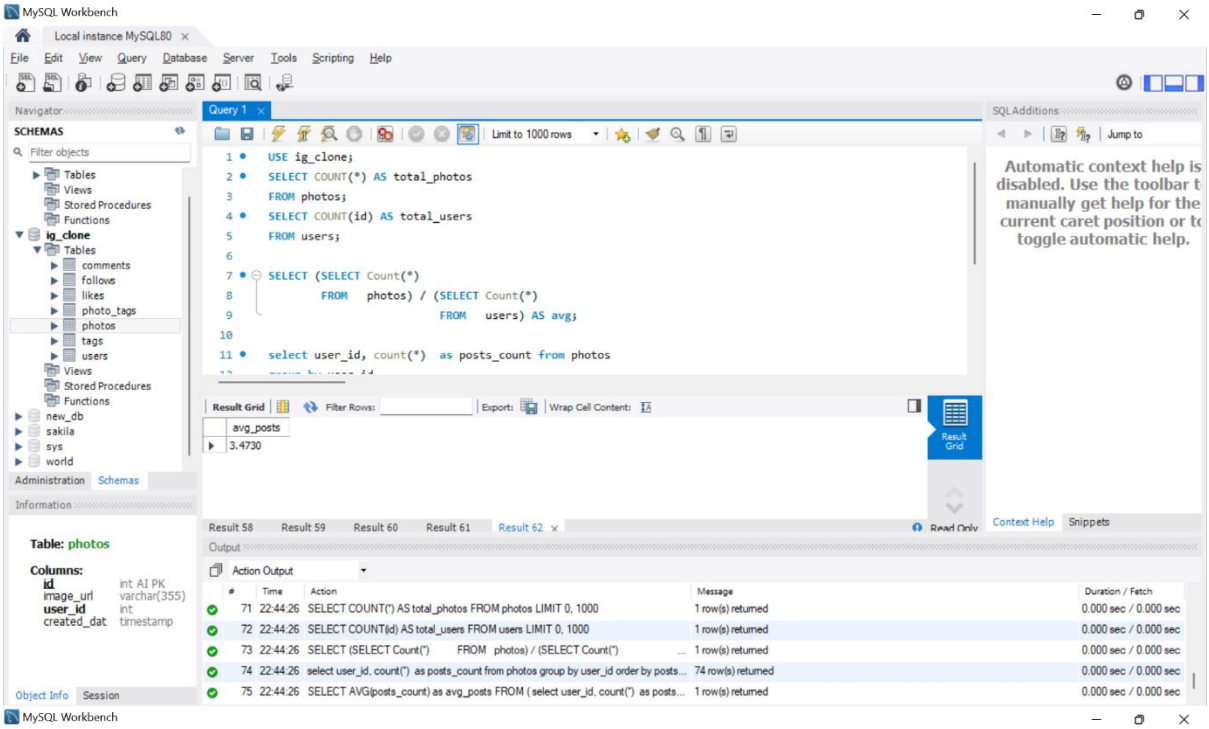
5. Ad Campaign Launch: The team wants to know the best day of the week to launch ads.
Your Task: Determine the day of the week when most users register on Instagram. Provide insights on when to schedule an ad campaign.

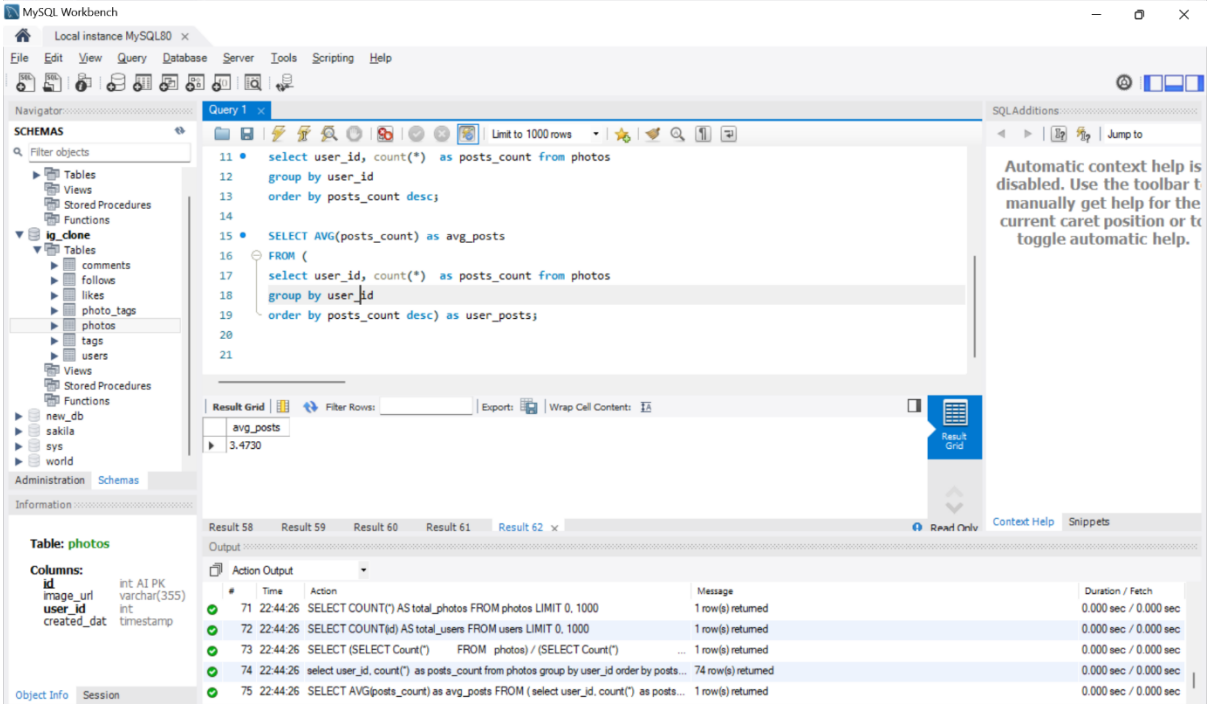


Insights : The insights derived from this analysis will be instrumental in identifying the optimal day of the week for initiating ad campaigns. By pinpointing the day that typically sees the highest number of new user registrations on Instagram, these findings will inform and refine your strategy for scheduling ad campaigns, ensuring they are launched when potential engagement is at its peak for maximal impact.

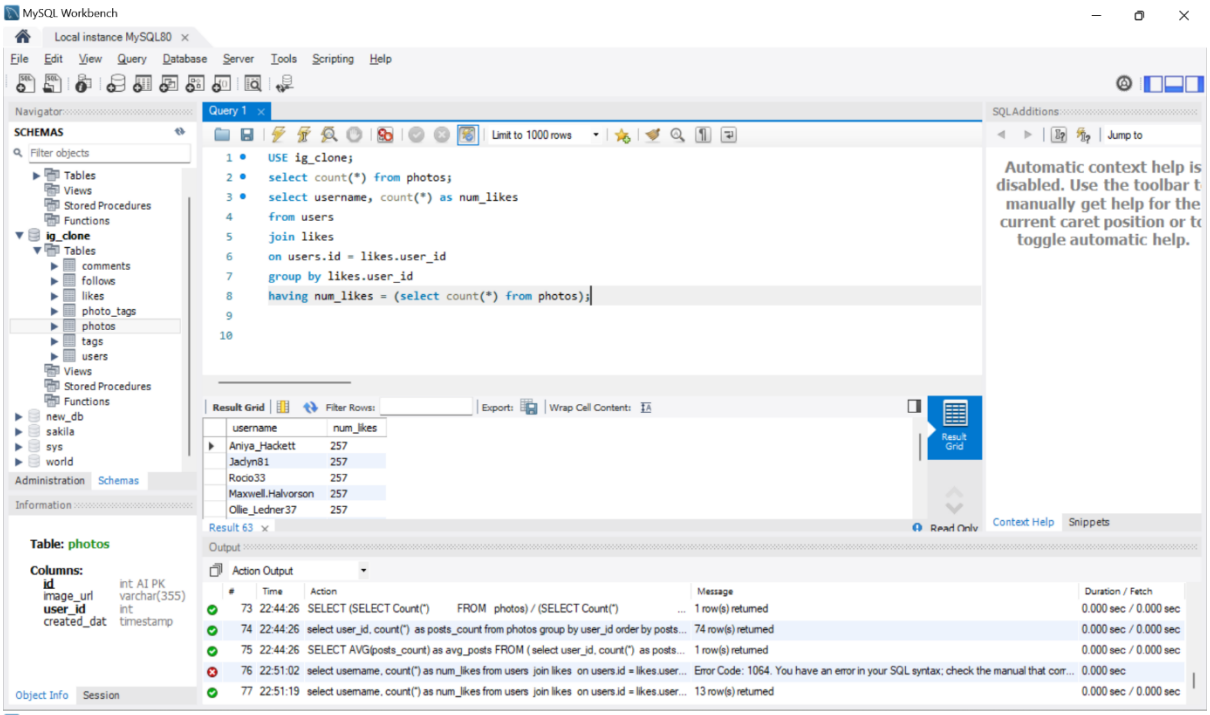
B) Investor Metrics:

1. User Engagement: Investors want to know if users are still active and posting on Instagram or if they are making fewer posts.
   Your Task: Calculate the average number of posts per user on Instagram. Also, provide the total number of photos on Instagram divided by the total number of users.





2. Bots & Fake Accounts: Investors want to know if the platform is crowded with fake and dummy accounts.
   Your Task: Identify users (potential bots) who have liked every single photo on the site, as this is not typically possible for a normal user.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Columns:
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image_url varchar(355)
user_id int
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Result Grid
Filter Rows:
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username num_likes
Aniya_Hackett 257
Jaclyn81 257
Rocio33 257
Maxwell.Halvorson 257
Ollie_Ledner37 257
Result 63
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73 22:44:26 SELECT (SELECT Count(*) FROM photos) / (SELECT Count(*) ... 1 row(s) returned 0.000 sec / 0.000 sec
74 22:44:26 select user_id, count(*) as posts_count from photos group by user_id order by posts... 74 row(s) returned 0.000 sec / 0.000 sec
75 22:44:26 SELECT AVG(posts_count) as avg_posts FROM (select user_id, count(*) as posts... 1 row(s) returned 0.000 sec / 0.000 sec
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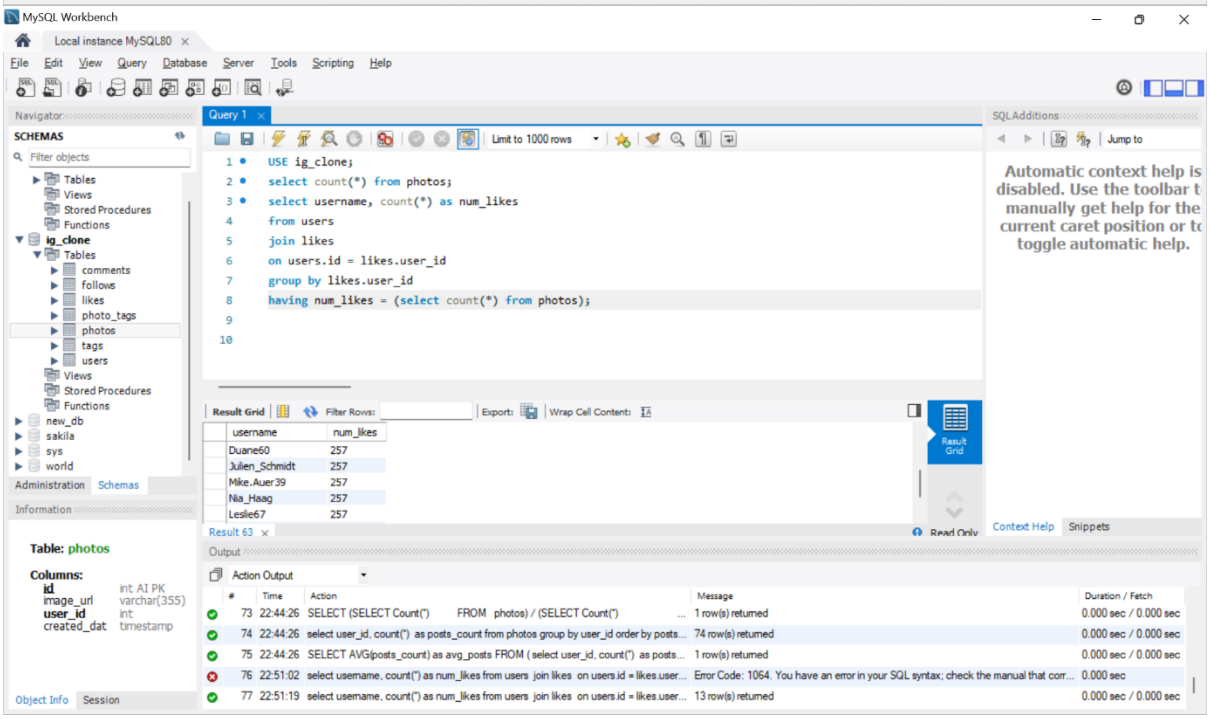
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Mike.Auer39 257
Nia_Haag 257
Leslie67 257
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