Instagram User Analytics Project

Purpose

The goal of this project is to study and analyse the user behaviour on Instagram and give insights to the stakeholders.

The project will identify the ways to derive business insights for marketing, product & development teams. Through this project, we will gain the knowledge about user behaviour and the engagement over the platform.

The final deliverable will recommend the most used hashtags, bot users and days to run the successful ad campaign.

Database

In order to draw meaningful conclusions that could be used for further decision making.

I had to collect data first. So, for that the commands were run from the following attachment:

https://docs.google.com/document/d/1-WhNRX1iYJIz7e5l28DMPWgsPklpE_w6/edit

in order to get a better understanding of the target audience and their needs. I also had to analyse the collected data

To complete this project the software used is DATABASE: MySQL v5.7 as it is easy to use and understandable.

Approach:

The main objective was to understand how they interact with our product. To do this, I analysed data from the database provided. By understanding our users' needs, we can create a product that is tailored to their needs and make sure that it meets all their expectations. Additionally, I wanted to use this project as an opportunity to learn more about user experience design principles so that I can apply them in future projects.

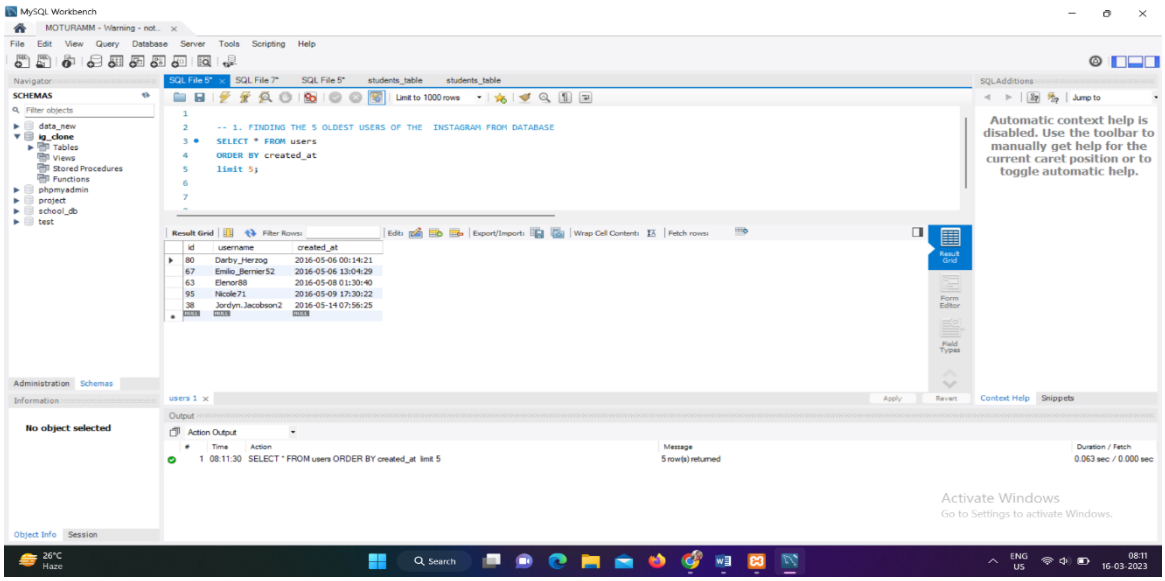
Marketing

1. Top 5 oldest users

```
SELECT *
FROM users
  ORDER BY created_at
```

LIMIT 5;

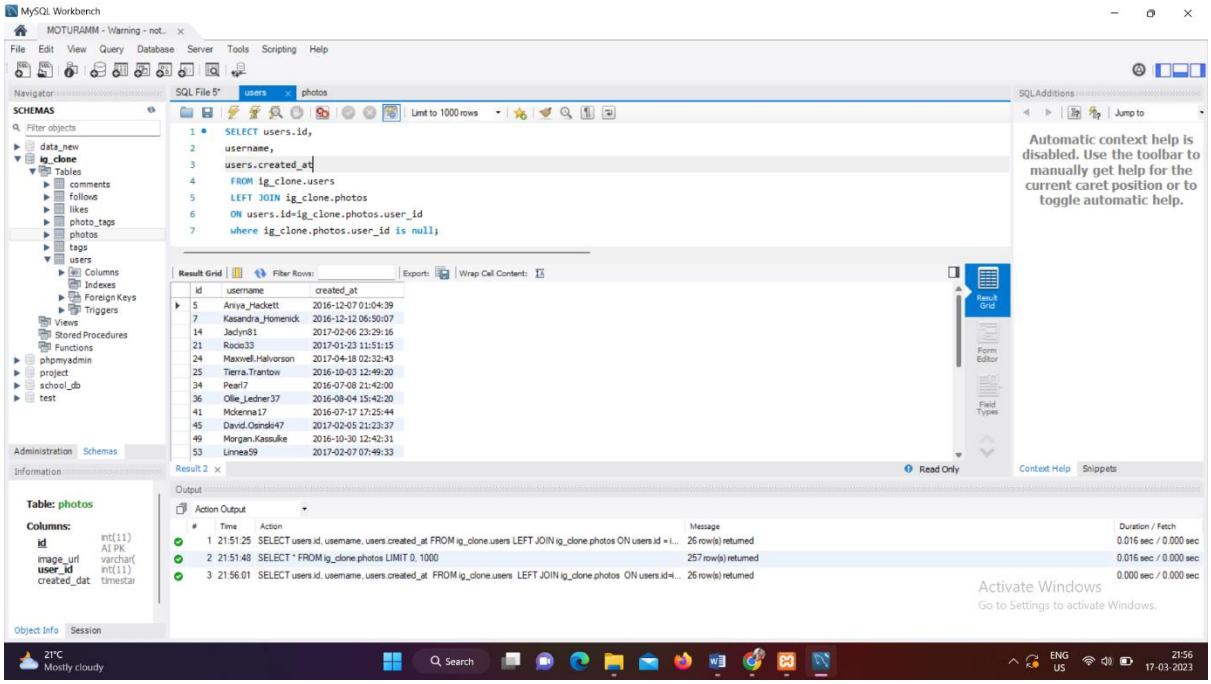
Result:



2. Remind Inactive Users to Start Posting

```
SELECT users.id,
username,
users.created_at
 FROM ig_clone.users
 LEFT JOIN ig_clone.photos
 ON users.id=ig_clone.photos.user_id
 where ig_clone.photos.user_id is null;
```

Result:


MySQL Workbench
MOTURAMM - Warning - not...
File Edit View Query Database Server Tools Scripting Help
SCHEMAS
data_new
ig_clone
Tables
comments
follows
likes
photo_tags
photos
tags
users
Columns
Indexes
Foreign Keys
Triggers
Views
Stored Procedures
Functions
phpmyadmin
project
school_db
test
SQL File 5*
users
photos
Limit to 1000 rows
1 SELECT users.id,
2 username,
3 users.created_at
4 FROM ig_clone.users
5 LEFT JOIN ig_clone.photos
6 ON users.id=ig_clone.photos.user_id
7 where ig_clone.photos.user_id is null;
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
id username created_at
5 Aniya_Hackett 2016-12-07 01:04:39
7 Kasandra_Homenick 2016-12-12 06:50:07
14 Jaclyn81 2017-02-06 23:29:16
21 Rocio33 2017-01-23 11:51:15
24 Maxwell.Halvorson 2017-04-18 02:32:43
25 Tierra.Trantow 2016-10-03 12:49:20
34 Pearl7 2016-07-08 21:42:00
36 Ollie_Ledner37 2016-08-04 15:42:20
41 Mckenna17 2016-07-17 17:25:44
45 David.Osinski47 2017-02-05 21:23:37
49 Morgan.Kassulke 2016-10-30 12:42:31
53 Linnea59 2017-02-07 07:49:33
Result 2
Read Only
SQLAdditions
Jump to
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.
Context Help
Snippets
Output
Action Output
Time Action Message Duration / Fetch
1 21:51:25 SELECT users.id, username, users.created_at FROM ig_clone.users LEFT JOIN ig_clone.photos ON users.id = i... 26 row(s) returned 0.016 sec / 0.000 sec
2 21:51:48 SELECT * FROM ig_clone.photos LIMIT 0, 1000 257 row(s) returned 0.016 sec / 0.000 sec
3 21:56:01 SELECT users.id, username, users.created_at FROM ig_clone.users LEFT JOIN ig_clone.photos ON users.id=i... 26 row(s) returned 0.000 sec / 0.000 sec
Information
Table: photos
Columns:
id int(11) AI PK
image_url varchar(
user_id int(11)
created_dat timestar
Object Info
Session
Activate Windows
Go to Settings to activate Windows.
21°C
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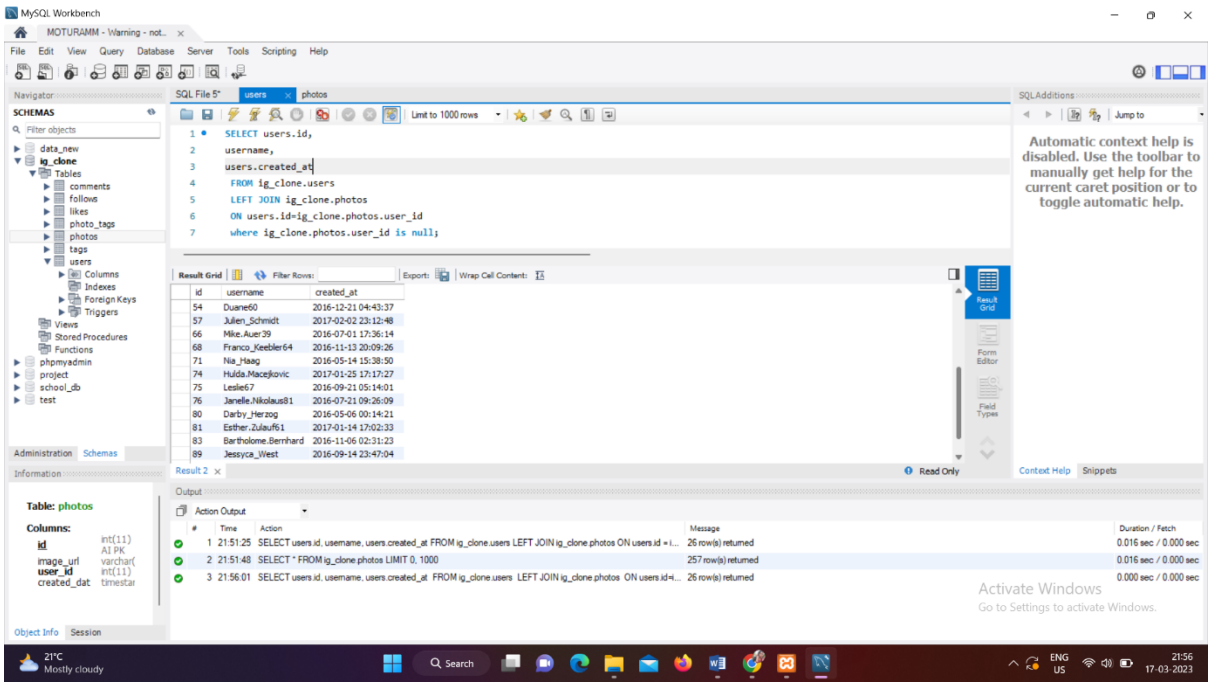
21:56
17-03-2023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Filter Rows:
Export:
Wrap Cell Content:
id username created_at
54 Duane60 2016-12-21 04:43:37
57 Julien_Schmidt 2017-02-02 23:12:48
66 Mike.Auer39 2016-07-01 17:36:14
68 Franco_Keebler64 2016-11-13 20:09:26
71 Nia_Haag 2016-05-14 15:38:50
74 Hulda.Macejkovic 2017-01-25 17:17:27
75 Leslie67 2016-09-21 05:14:01
76 Janelle.Nikolaus81 2016-07-21 09:26:09
80 Darby_Herzog 2016-05-06 00:14:21
81 Esther.Zulauf51 2017-01-14 17:02:33
83 Bartholome.Bernhard 2016-11-06 02:31:23
89 Jessyca_West 2016-09-14 23:47:04
Result 2
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SQLAdditions
Jump to
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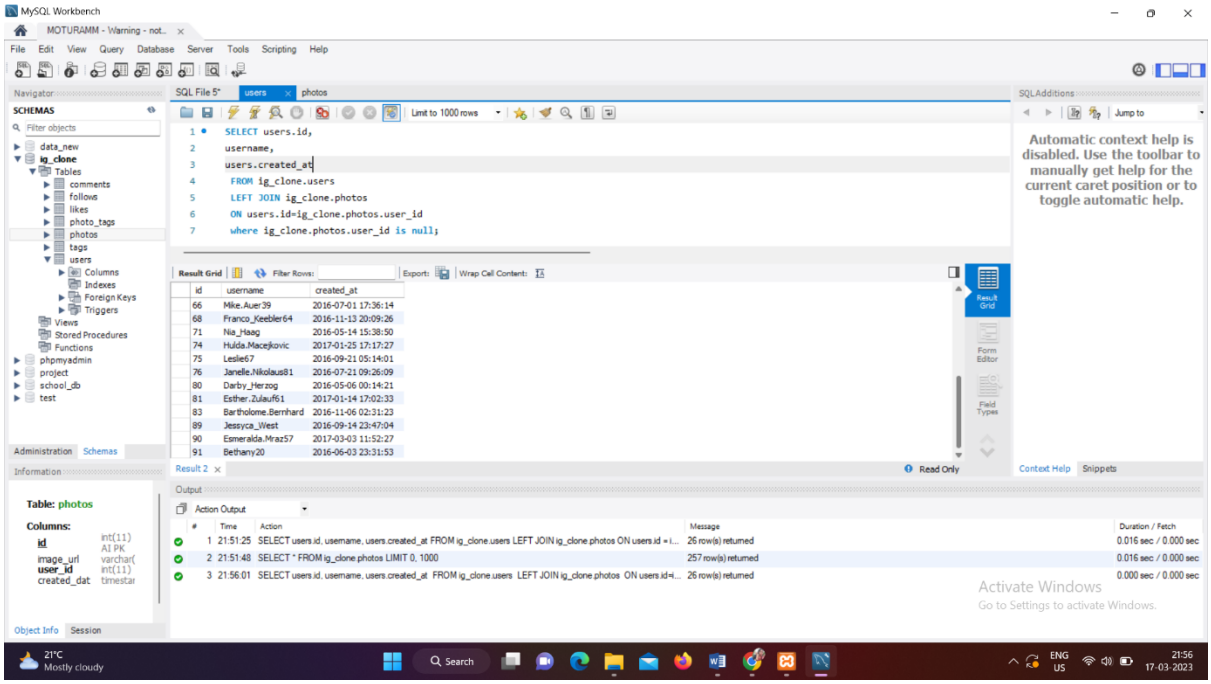


3 .CONTENT WRITER

SELECT * FROM (SELECT * from (sELECT photo_id,count(photo_id)as most_liked from ig_clone.likes

GROUP BY photo_id

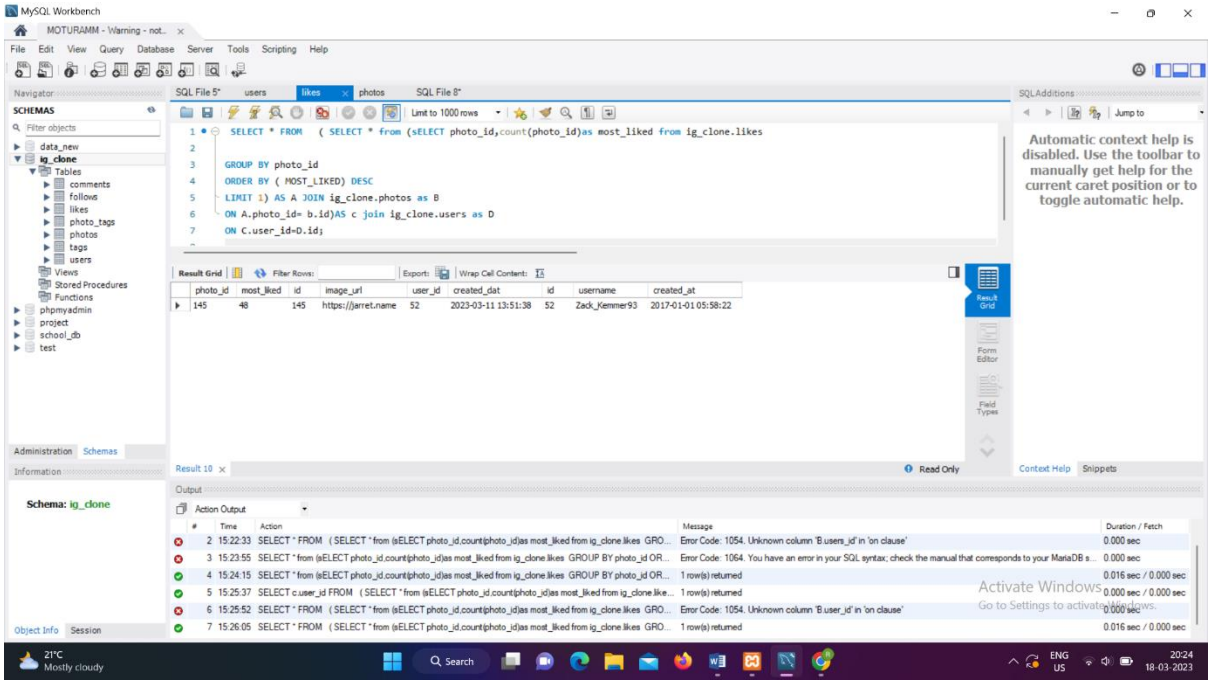
ORDER BY (MOST_LIKED) DESC

LIMIT 1) AS A JOIN ig_clone.photos as B

ON A.photo_id= b.id)AS c join ig_clone.users as D

ON C.user_id=D.id;

Result:



4. Hashtag Researching

select P.tag_id,Q.tag_name,most_taged from (SELECT tag_id,count(tag_id) as most_taged FROM ig_clone.photo_tags

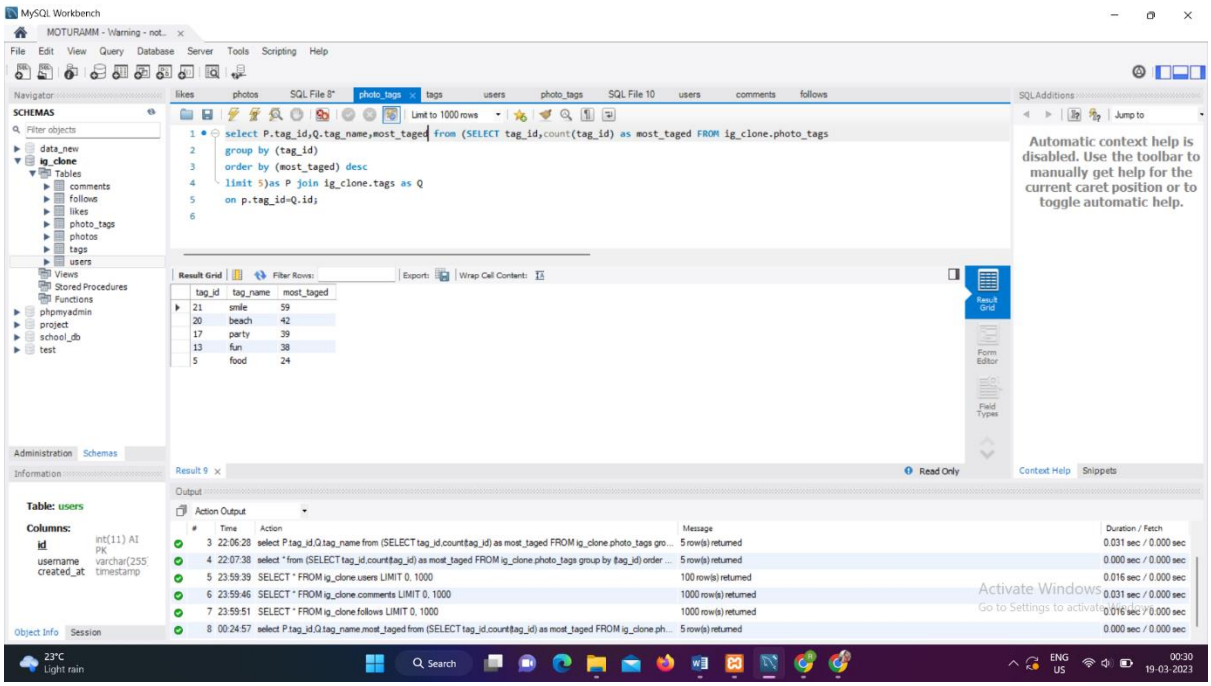
group by (tag_id)

order by (most_taged) desc

limit 5)as P join ig_clone.tags as Q

on p.tag_id=Q.id;

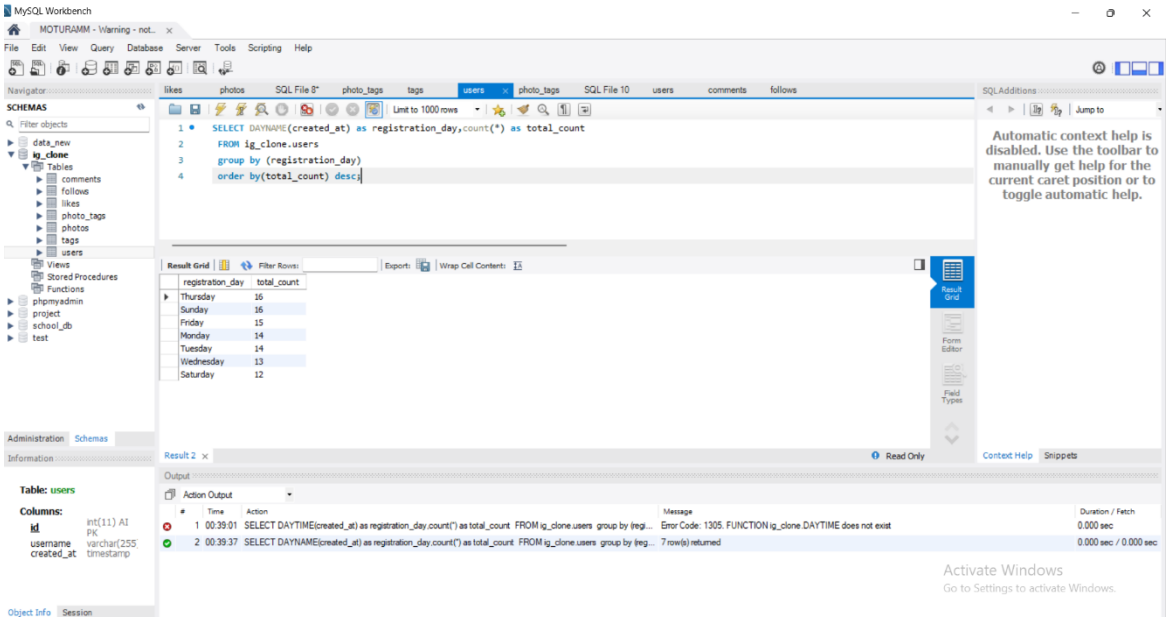
Result:



5. AD campaign

```
SELECT
    DAYNAME(created_at) AS day_of_the_week,
    COUNT(*) AS total_count
FROM ig_clone.users
    GROUP by day_of_the_week
    ORDER by total_count DESC;
```

Result:

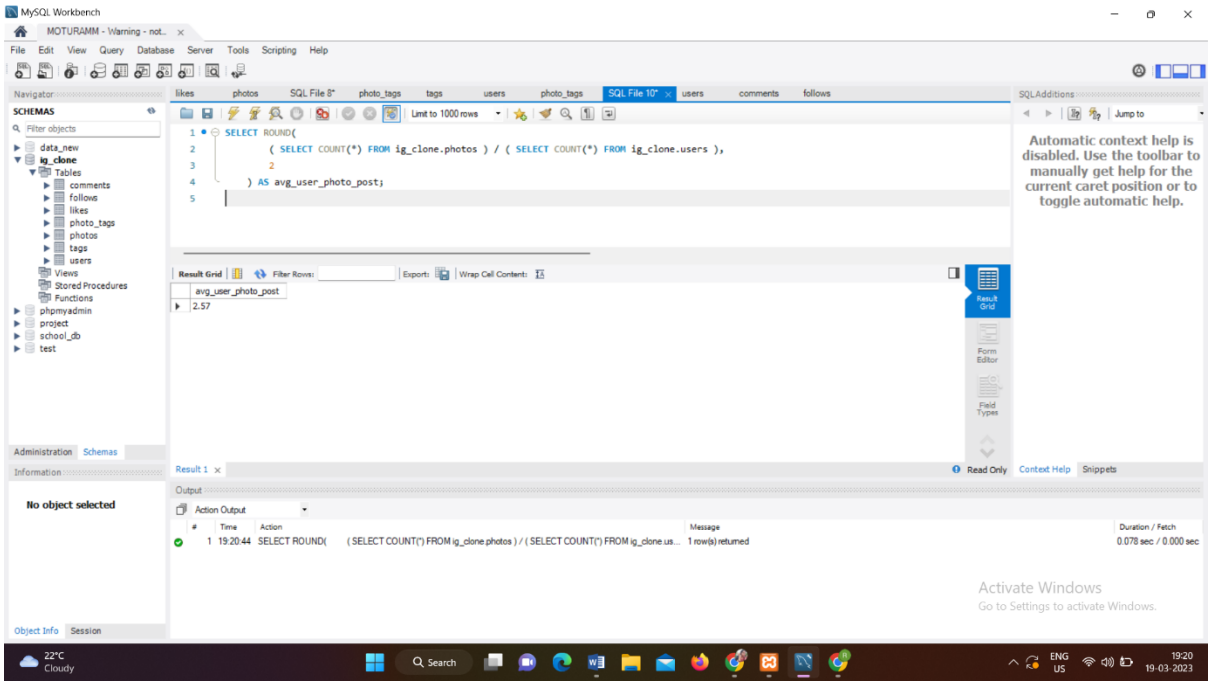


B) Investor Metrics:

1. User Engagement

```
SELECT
   ROUND(
      ( SELECT COUNT(*) FROM ig_clone.photos ) / ( SELECT COUNT(*) FROM ig_clone.users ),
      2
   ) AS avg_user_photo_post;
```

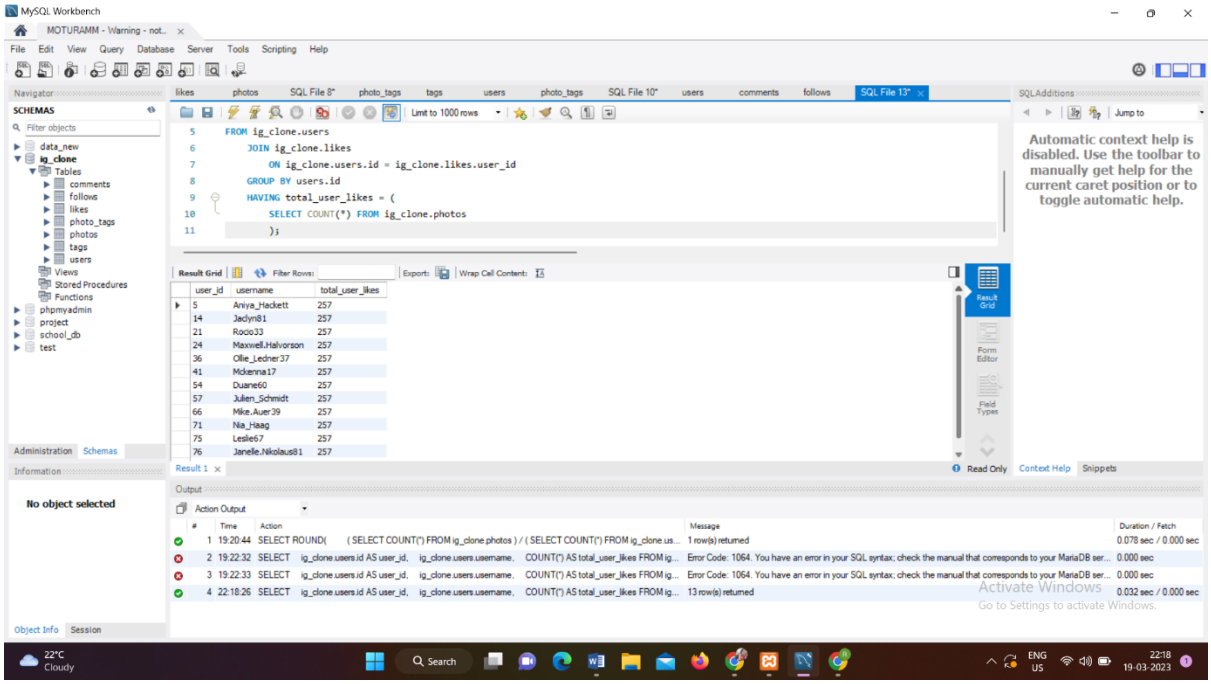
Result:



2. Bot Accounts

```
SELECT
    ig_clone.users.id AS user_id,
    ig_clone.users.username,
    COUNT(*) AS total_user_likes
FROM ig_clone.users
    JOIN ig_clone.likes
        ON ig_clone.users.id = ig_clone.likes.user_id
    GROUP BY users.id
    HAVING total_user_likes = (
        SELECT COUNT(*) FROM ig_clone.photos
    );
```

Result: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ON ig_clone.users.id = ig_clone.likes.user_id
GROUP BY users.id
HAVING total_user_likes = (
SELECT COUNT(*) FROM ig_clone.photos
);
user_id username total_user_likes
5 Aniya_Hackett 257
14 Jaclyn81 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
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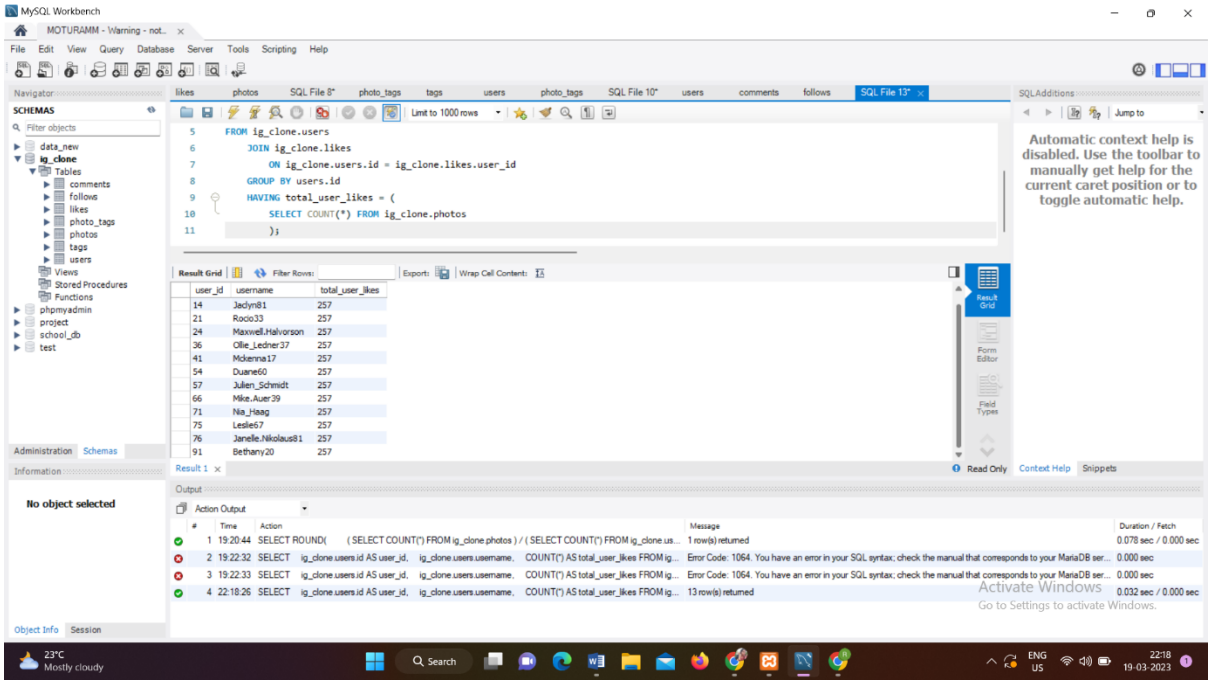
US
22:18
19-03-2023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ON ig_clone.users.id = ig_clone.likes.user_id
GROUP BY users.id
HAVING total_user_likes = (
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);
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91 Bethany20 257
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Conclusion:

Through this project, we were able to gain insights into how users think and behave when interacting with a product. We discovered a number of key insights about user behaviour, preferences, and expectations that can be used to inform future product design decisions. In particular, we identified trends in user behaviour that could be used to improve user experience, such as providing helpful feedback loops or streamlining processes for specific tasks. Overall, our user analysis project has provided us with valuable insights that can help us create better products in the future.