REPORT ON: INSTAGRAM USER ANALYTICS

WITH THE HELP OF MySQL

Project Report on Instagram User Analytics

Description:

Imagine you're a data analyst working with the product team at Instagram. Your role involves analyzing user interactions and engagement with the Instagram app to provide valuable insights that can help the business grow. User analysis involves tracking how users engage with a digital product, such as a software application or a mobile app. The insights derived from this analysis can be used by various teams within the business. The purpose of this project is to analyze the dataset and solve the given problems accordingly. The approach taken was to complete watching the lectures and complete the project accordingly.

Approach:

My main approach toward the project completion was to first complete all the recorded video lectures and then complete the project with the knowledge gained by them. First of all, I went to the data set provided. As I saw similar words which I learnt I gained a little confidence in completing the project. As I was learning the concepts, I got to know how to solve the concepts in the projects.

Tech-Stack Used:

The software used is MySQL Workbench 8.0 CE. As suggested, while learning the concepts I was working side by side on it too. Using MySQL Workbench is very easy, and we get to access the databases very easily, and it is easy to create new ones.
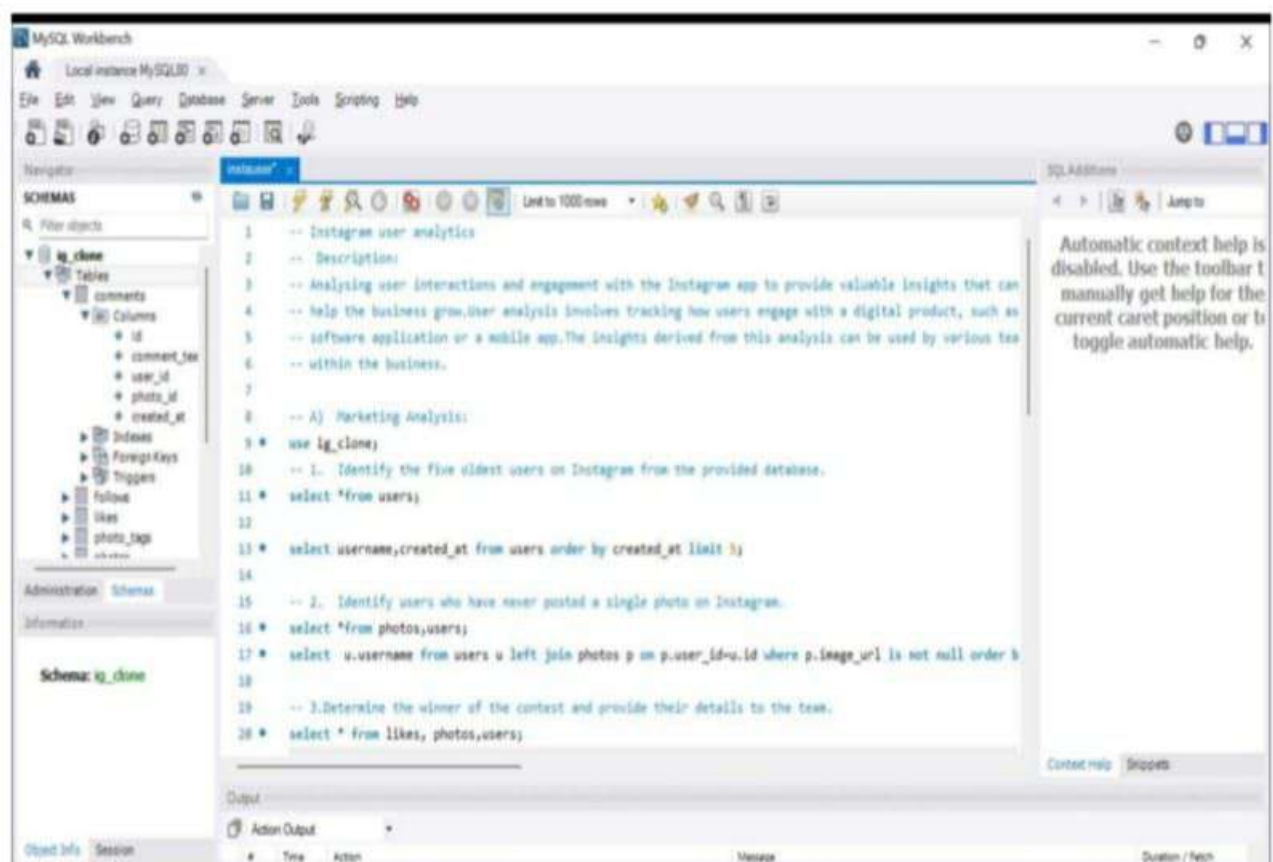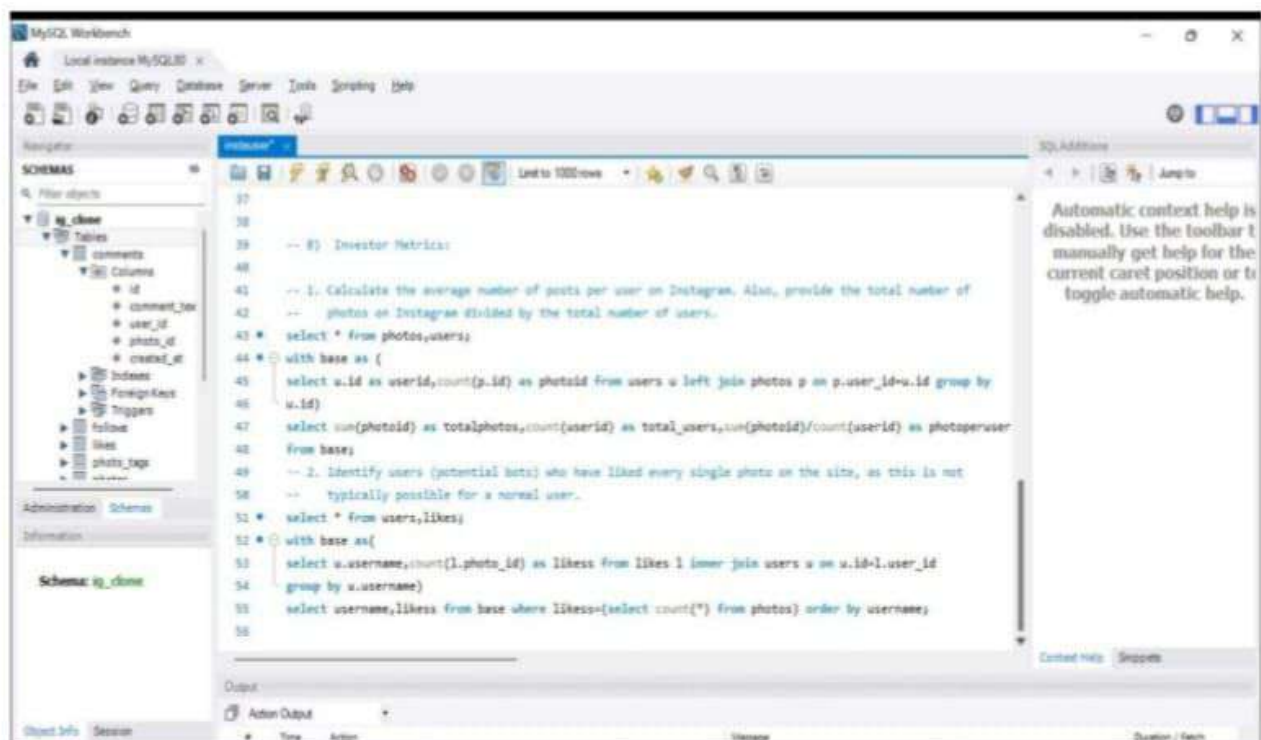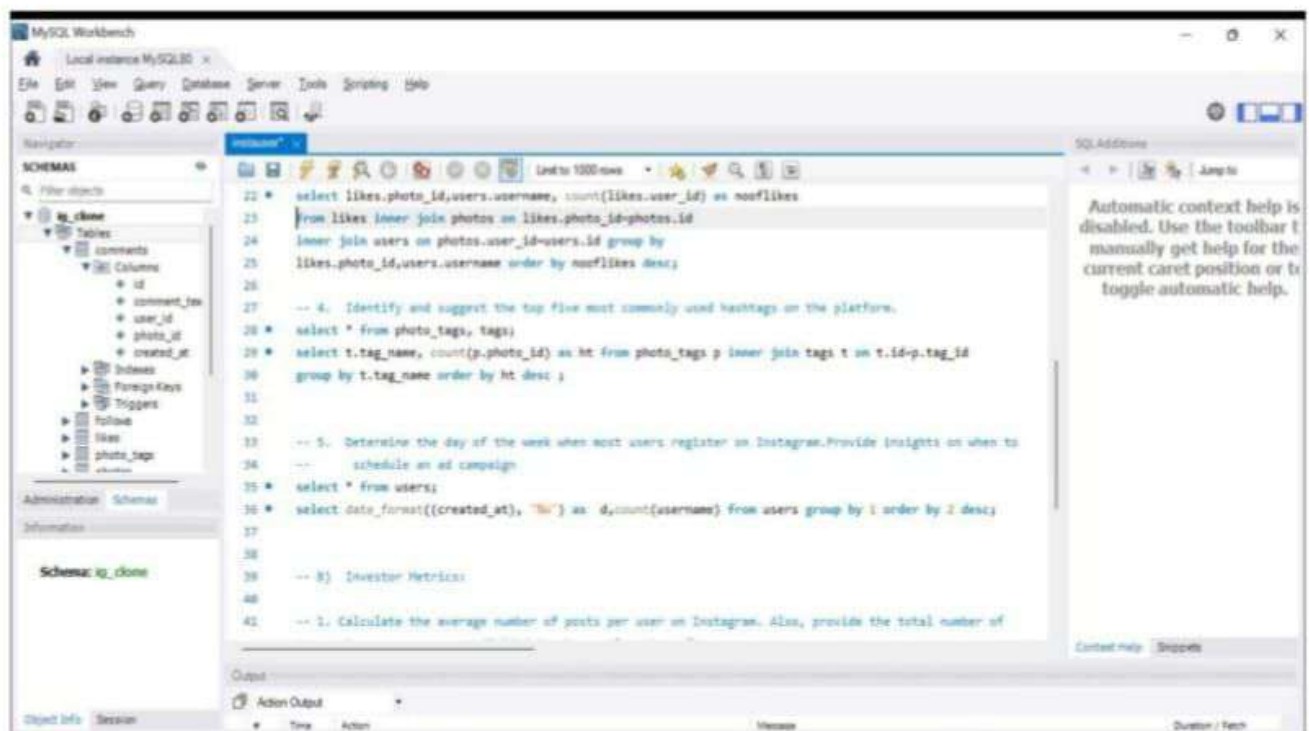
Insights:

During the time I was working on this project I gained knowledge about various commands used in SQL like select, drop, truncate, join etc. As in this project we were already provided with the data set all we need to do was to code according to the concepts given. At first when I saw the dataset, I felt really intimidated by seeing the number of pages in it but when I gradually started working on it, by the passage of time I was able to carack the way to complete the project. This project taught me a lot other than the theoretical and practical knowledge I learnt another important thing that is time management, which is extremely important as a student.

Results:

This project helped me build confidence in coding according to the requirements. At first, I was nervous whether I would be able to complete the project within the given deadline but as my confidence increased while attending the lectures, I was able to complete the project with ease. This project helped me analyze the information easily. And I also feel I will be able to become a better analyst with the passage of time.

SQL CODE

```
22 •  select likes.photo_id,users.username, count(likes.user_id) as nooflikes
23     from likes inner join photos on likes.photo_id=photos.id
24     inner join users on photos.user_id=users.id group by
25     likes.photo_id,users.username order by nooflikes desc;
26
27     -- 4.  Identify and suggest the top five most commonly used hashtags on the platform.
28 •  select * from photo_tags, tags;
29 •  select t.tag_name, count(p.photo_id) as ht from photo_tags p inner join tags t on t.id=p.tag_id
30     group by t.tag_name order by ht desc ;
31
32
33     -- 5.  Determine the day of the week when most users register on Instagram.Provide insights on when to
34     --       schedule an ad campaign
35 •  select * from users;
36 •  select date_format((created_at), '%W') as d,count(username) from users group by 1 order by 2 desc;
37
38
39     -- 8) Investor Metrics:
40
41     -- 1. Calculate the average number of posts per user on Instagram. Also, provide the total number of
```



```
37
38
39     -- 8) Investor Metrics:
40
41     -- 1. Calculate the average number of posts per user on Instagram. Also, provide the total number of
42     --    photos on Instagram divided by the total number of users.
43 •  select * from photos,users;
44 • ⊟ with base as (
45     select u.id as userid,count(p.id) as photoid from users u left join photos p on p.user_id=u.id group by
46     u.id)
47     select sum(photoid) as totalphotos,count(userid) as total_users,sum(photoid)/count(userid) as photoperuser
48     from base;
49     -- 2. Identify users (potential bots) who have liked every single photo on the site, as this is not
50     --    typically possible for a normal user.
51 •  select * from users,likes;
52 • ⊟ with base as(
53     select u.username,count(l.photo_id) as likess from likes l inner join users u on u.id=l.user_id
54     group by u.username)
55     select username,likess from base where likess=(select count(*) from photos) order by username;
56
```

SQL TASKS: A) Marketing Analysis:

<u>Task 1</u>: Identify the five oldest users on Instagram from the provided database.

In this task we need to find the five oldest users of the Instagram app using the dataset provided. We will be using the users table to get the information.
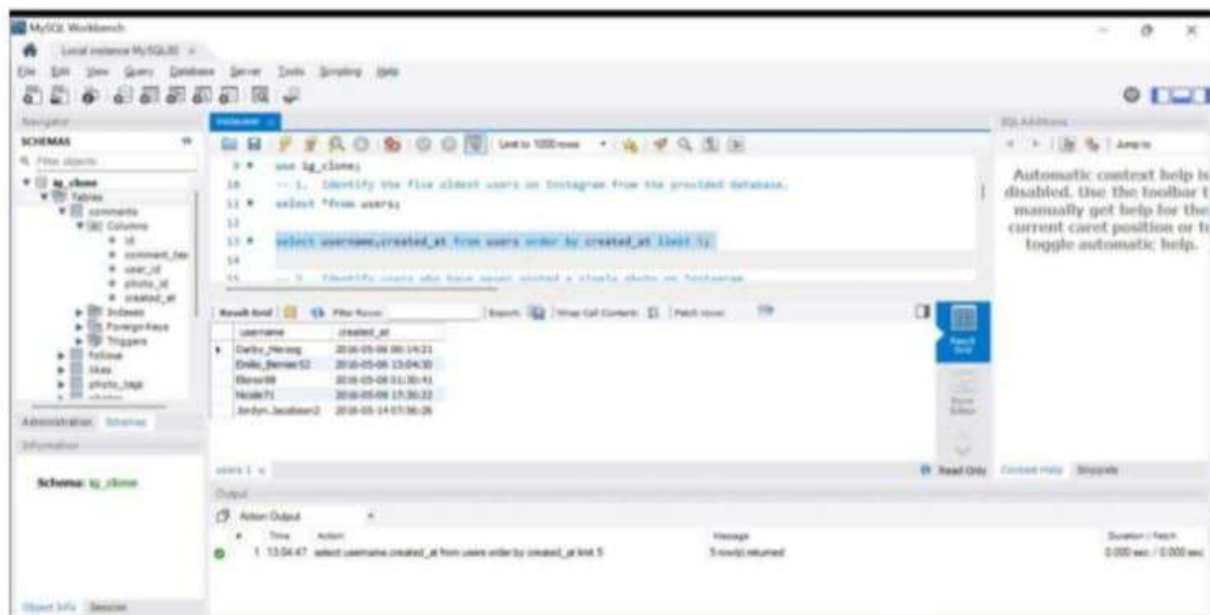
Task 2: Identify users who have never posted a single photo on Instagram.

In this task we are going to spot the inactive users of the app. We will be using the users table and the photos table for the same.
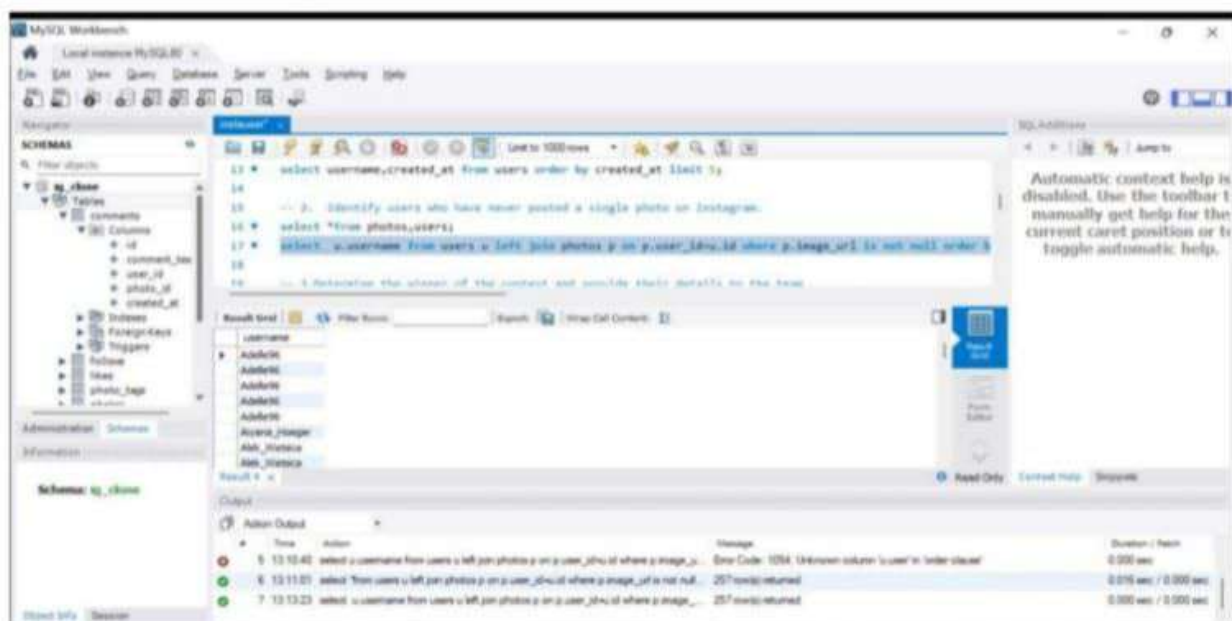
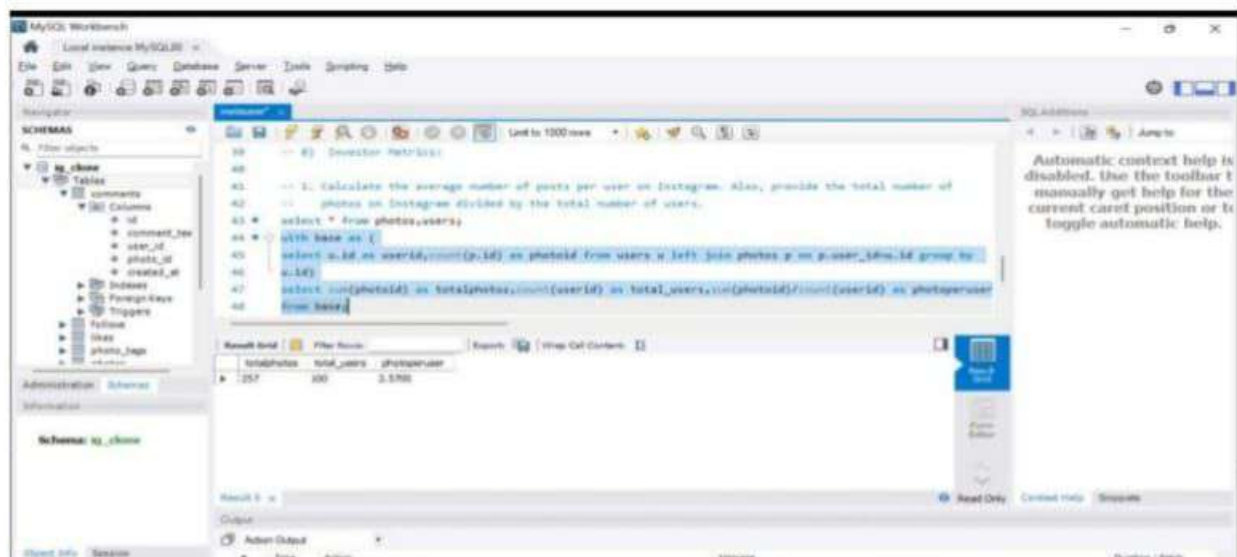Task 3: Determine the winner of the contest and provide their details to the team.

In this task the team held a competition in which the user with the highest likes would win. So, in this task we will be using the tables likes, photos and users.
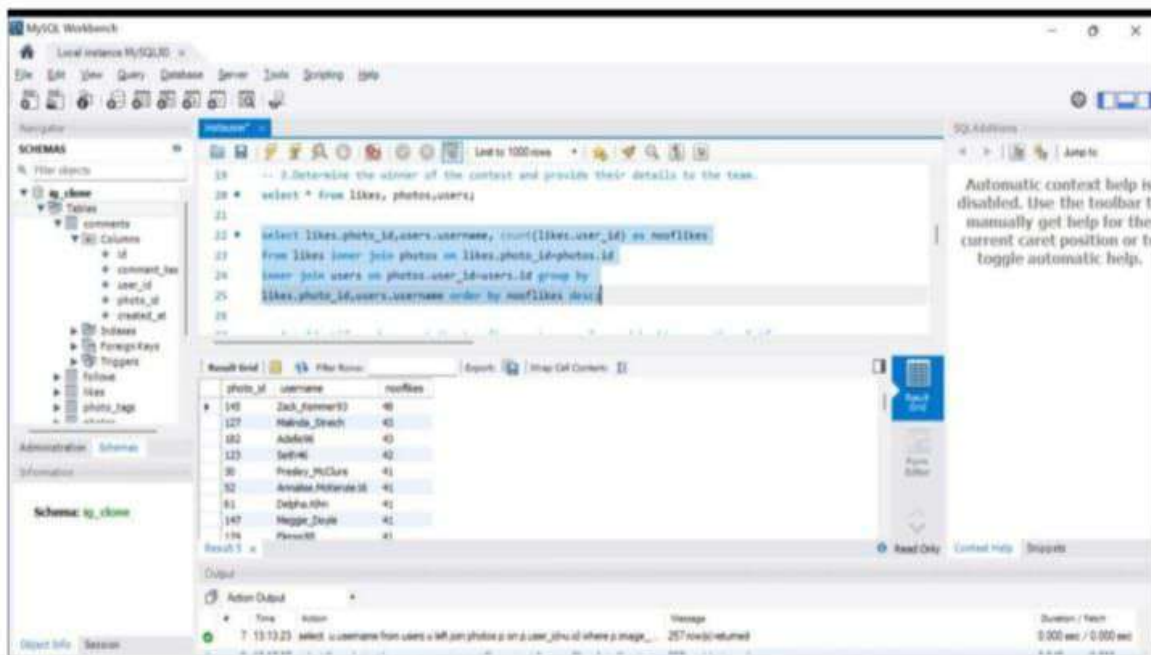
Task 4: Identify and suggest the top five most commonly used hashtags on the platform.

In this task we will be going through various photos and will be suggesting the top 5 most commonly used hashtags. We will be using photo and the tags tables.
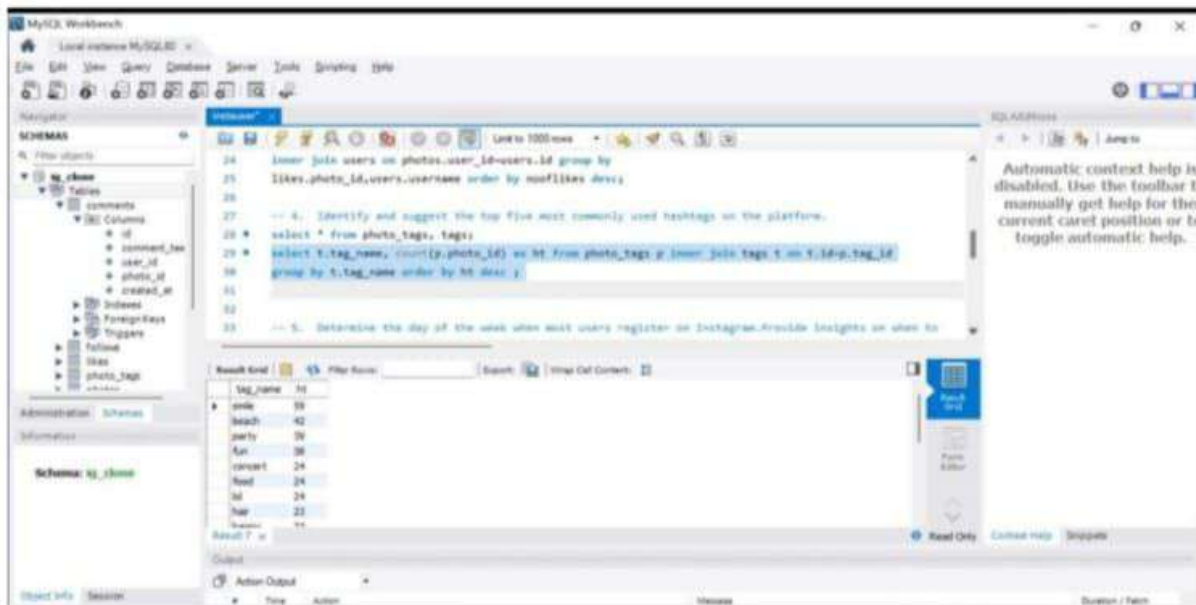
Task 5: Determine the day of the week when most users register on Instagram. Provide insights on when to schedule an ad campaign.

In this task we will be finding the day on which most of the users created their accounts. So, the information will be purely based in the user's table.
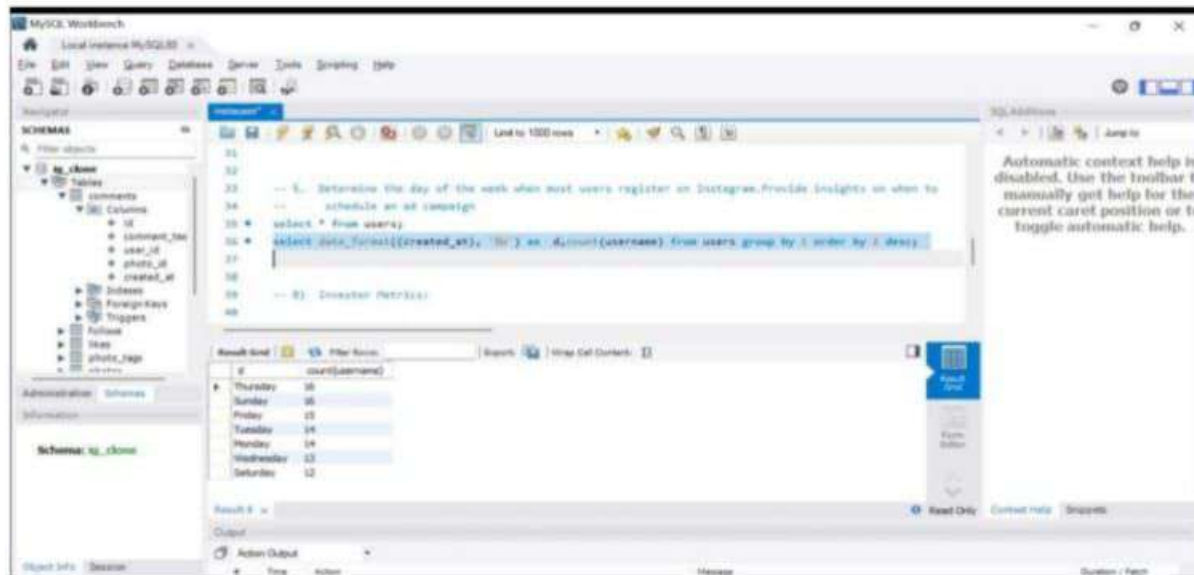
B) Investor Metrics:

Task 1: 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.

In this task this information will be taken from photos and users' table.

Task 2: Identify users (potential bots) who have liked every single photo on the site, as this is not typically possible for a normal user.

In this task the information will be taken from the users and likes tables.

PRACHITI MALI

I have code experiences and my studies in the field of:
Python | HTML | SQL | C | C++ | Report Making | Data Analytics

You can follow me and repost my content, I am ready to receive your comments

prachitim2003@gmail.com