

PROJECT-2

INSTAGRAM USER ANALYTICS

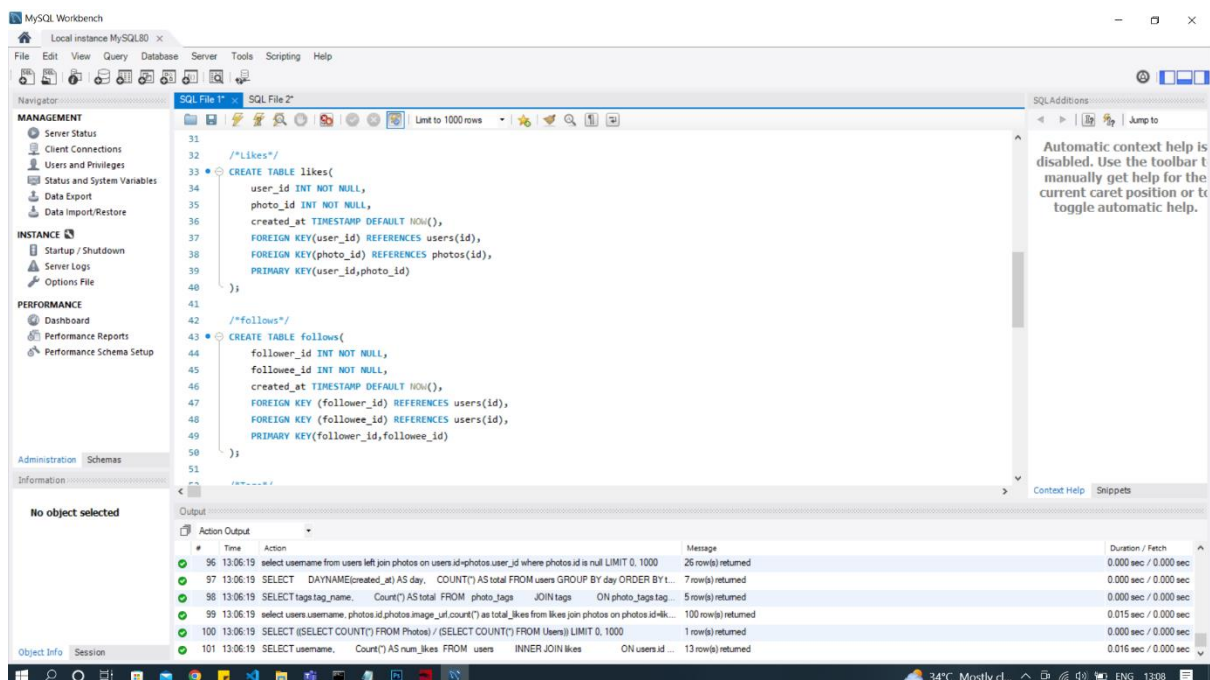
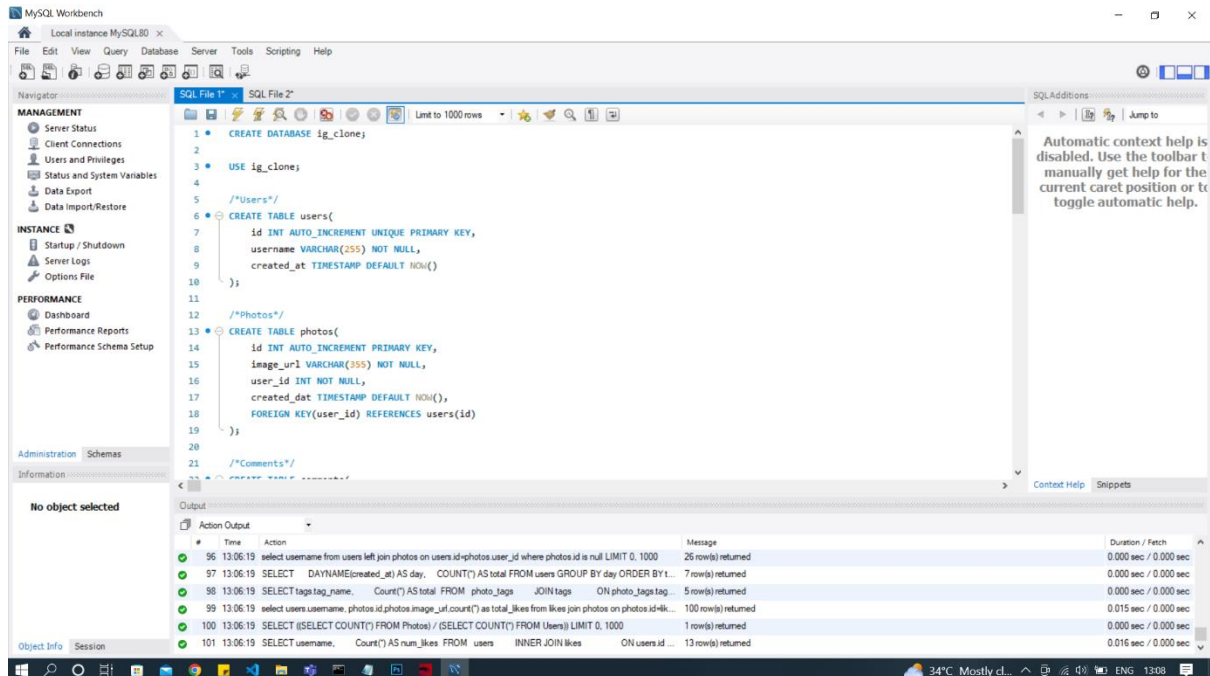
My project is on Instagram user analytics, In this project I have drawn insights on the questions which are asked by the management.

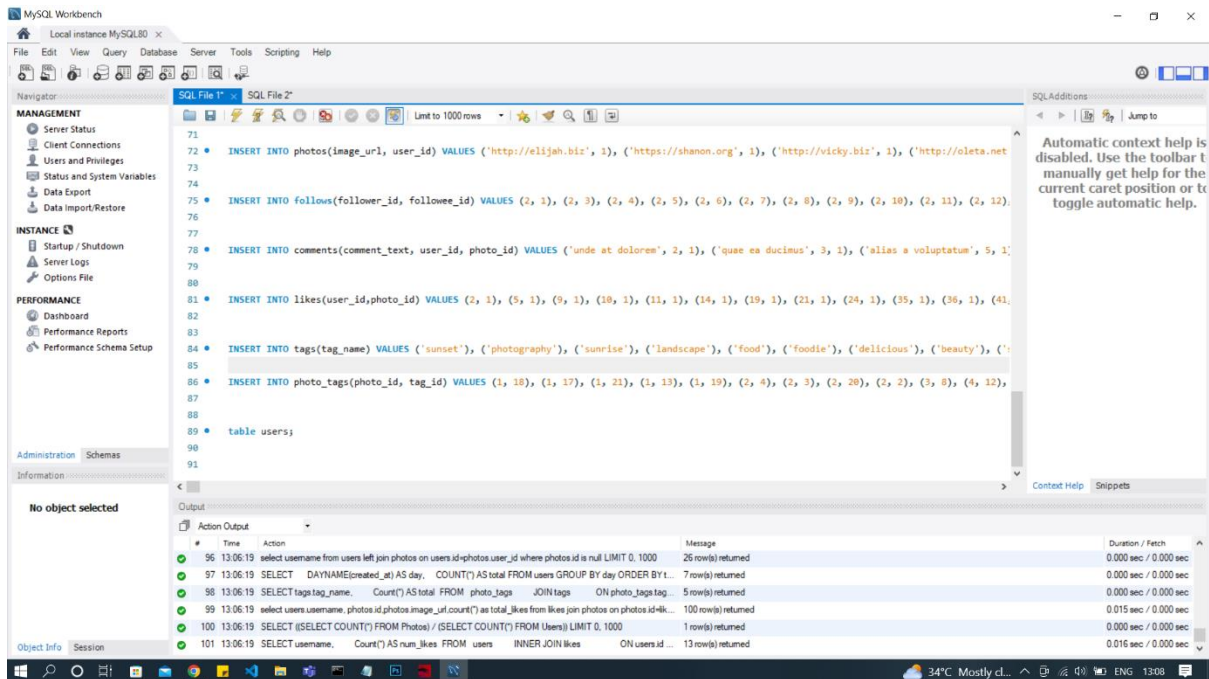
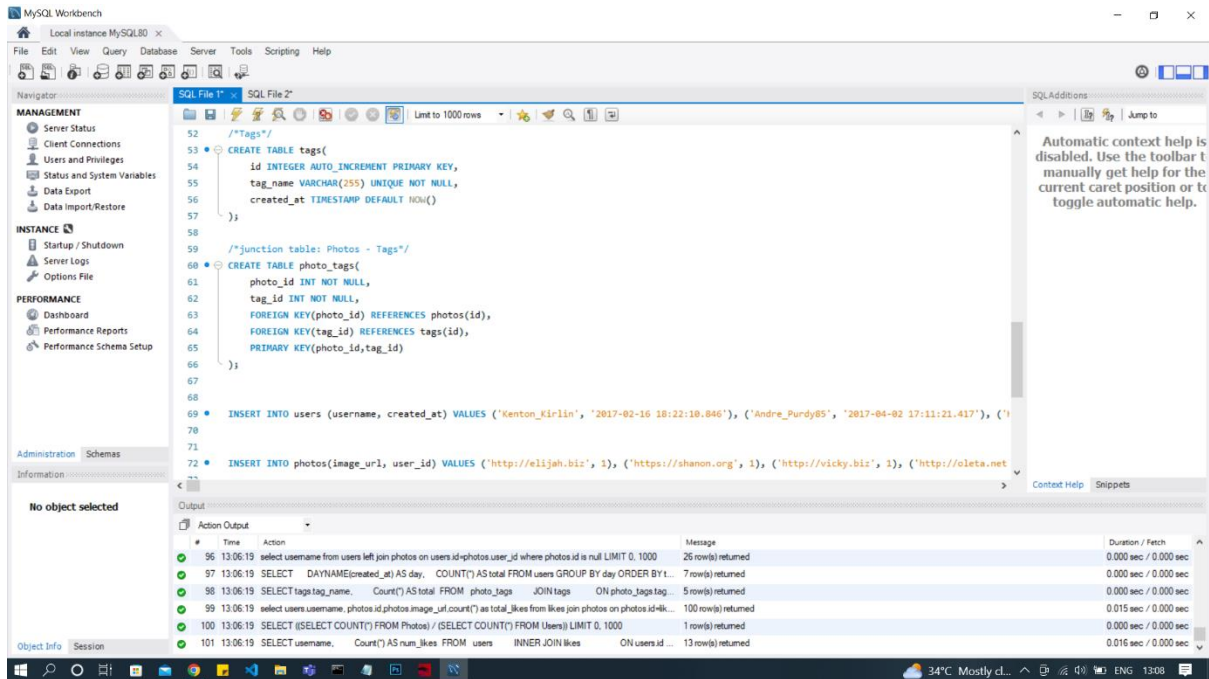
In this project I have created a database by using some commands and then I used MySQL to write queries to get the information. The things I got to find out in the project is:

- 1.finding the 5 oldest users in the Instagram provided in the database
- 2.find the users who never posted a single photo in Instagram
- 3.identify the winner of the contest and provide their details
- 4.identify and suggest the top 5 most commonly used hashtags on the platform
- 5.what day of the week do most users are registered on
- 6.how many times does average user posts on Instagram
- 7.who liked every single photo on the site.

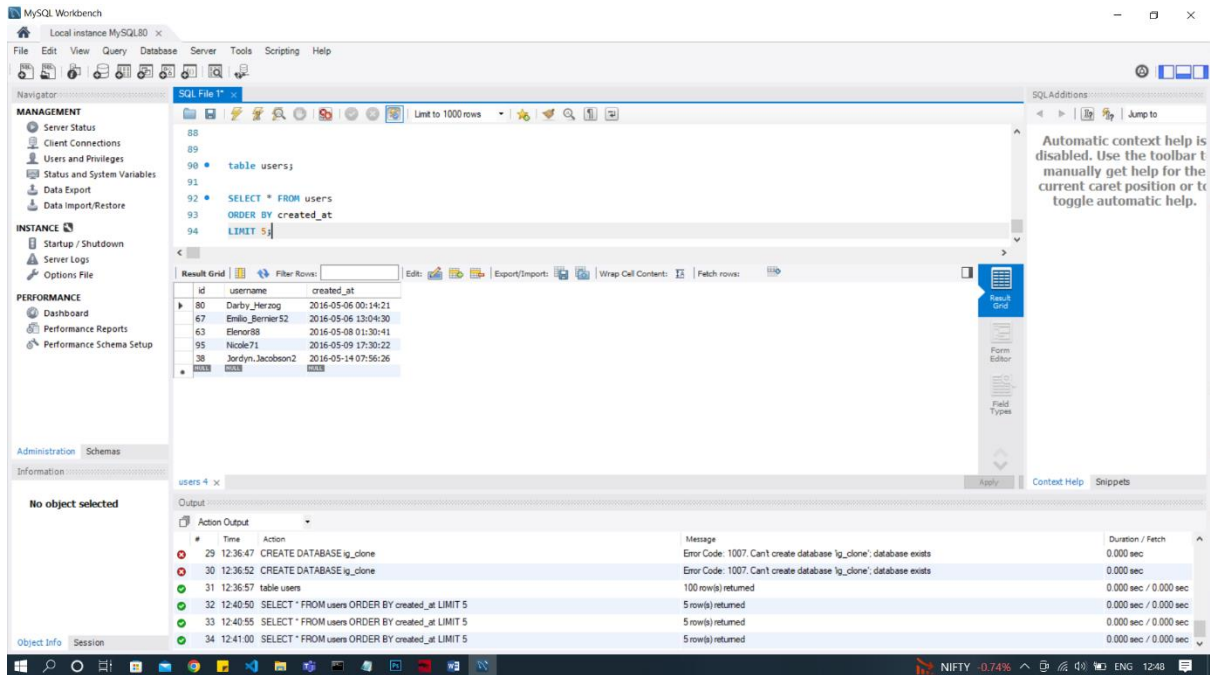
Tech-stack used is MySQL for this project and it helped me to create a database and it helped me to retrieve some data and wrote queries to get some insights on this project.

APPROACH: Firstly, I have installed MySQL in my pc, and then I created a database which trainity has provided by giving commands

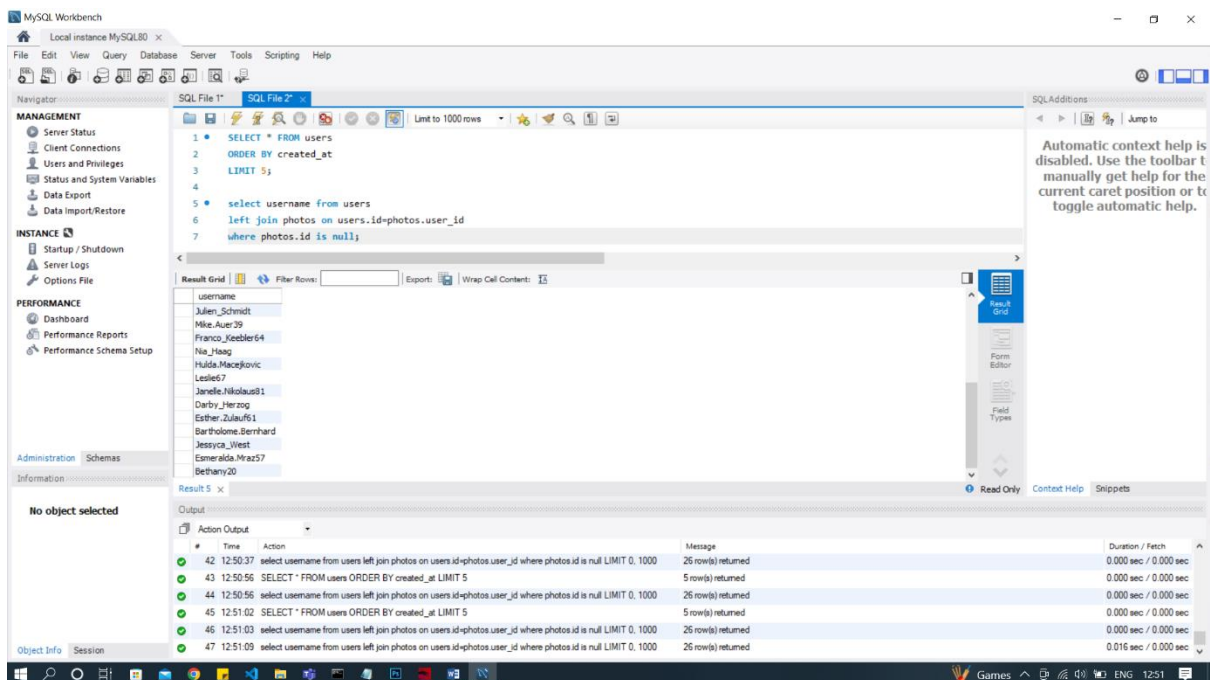




After creating database then I started writing queries to retrieve some data. The first question is who is the oldest user in Instagram.



2nd question is who never posted a single photo on Instagram



3rd question is identifying the winner in a context

The screenshot shows the MySQL Workbench interface. The SQL editor contains a query to find the most liked photos. The query is as follows:

```
25 ORDER BY total_likes DESC
26 LIMIT 5;
27
28 /*most likes in the Instagram*/
29 select users.username, photos.id, photos.image_url, count(*) as total_likes
30 from likes
31 join photos on photos.id=likes.photo_id
32 join users on users.id=likes.photo_id
33 group by photos.id
34 order by total_likes desc
35
```

The result grid shows the following data:

username	id	image_url	total_likes
Jayson65	61	https://degon.name	41
Kaley9	30	https://kenney.com	41
Zack_Kiemer93	52	https://herahel.com	41
Alexandro35	13	https://fred.com	40
Tomas.Beatty93	97	https://carolanne.com	40
Javonte83	100	https://brook.com	39
Ressie_Stanton46	62	https://igoberto.net	39
Mike_Auer39	66	http://lonel.net	39
Seth46	44	http://golden.org	39

The output pane shows the execution of the query, with a message indicating that 10 rows were returned.

4th question is 5 commonly most used hashtags

The screenshot shows the MySQL Workbench interface. The SQL editor contains a query to find the 5 most commonly used hashtags. The query is as follows:

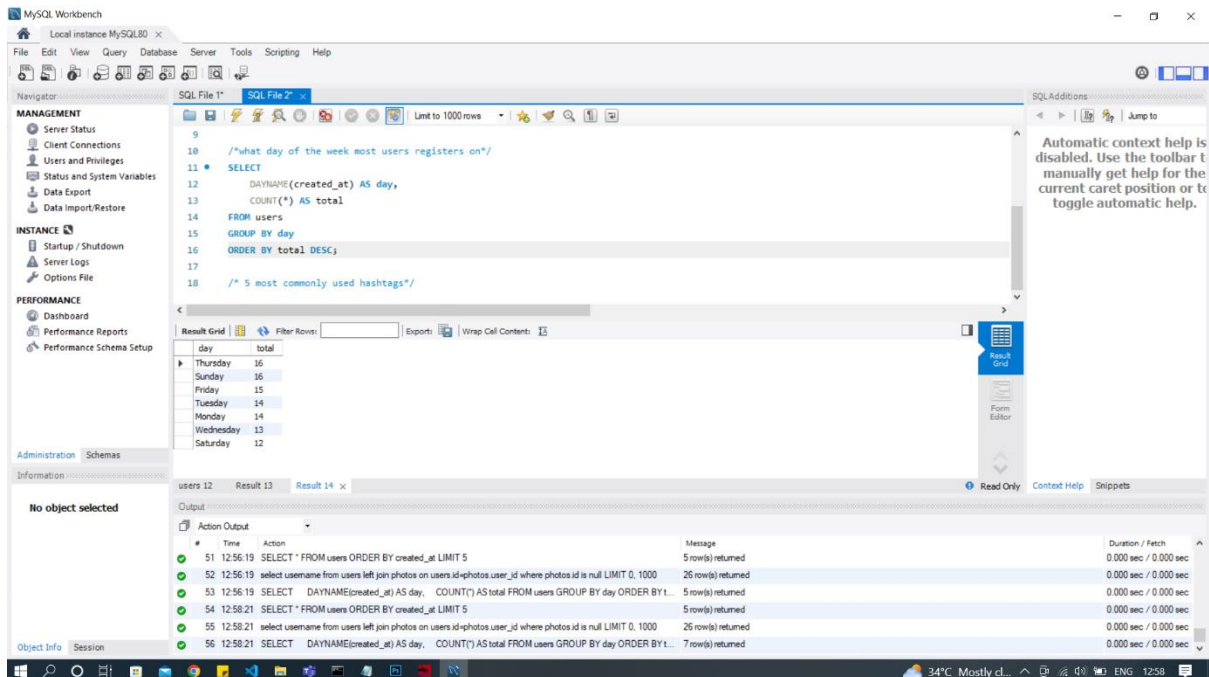
```
18 /* 5 most commonly used hashtags*/
19 select tags.tag_name,
20 count(*) as total
21 from photo_tags
22 join tags
23 on photo_tags.tag_id = tags.id
24 group by tags.id
25 order by total_likes desc
26 limit 5;
27
```

The result grid shows the following data:

tag_name	total
smile	59
beach	42
party	39
fun	38
concert	24

The output pane shows the execution of the query, with a message indicating that 5 rows were returned.

5th question is What day of the week do most users register on



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
9
10 /*what day of the week most users registers on*/
11 SELECT
12     DAYNAME(created_at) AS day,
13     COUNT(*) AS total
14 FROM users
15 GROUP BY day
16 ORDER BY total DESC;
17
18 /* 5 most commonly used hashtags*/
```

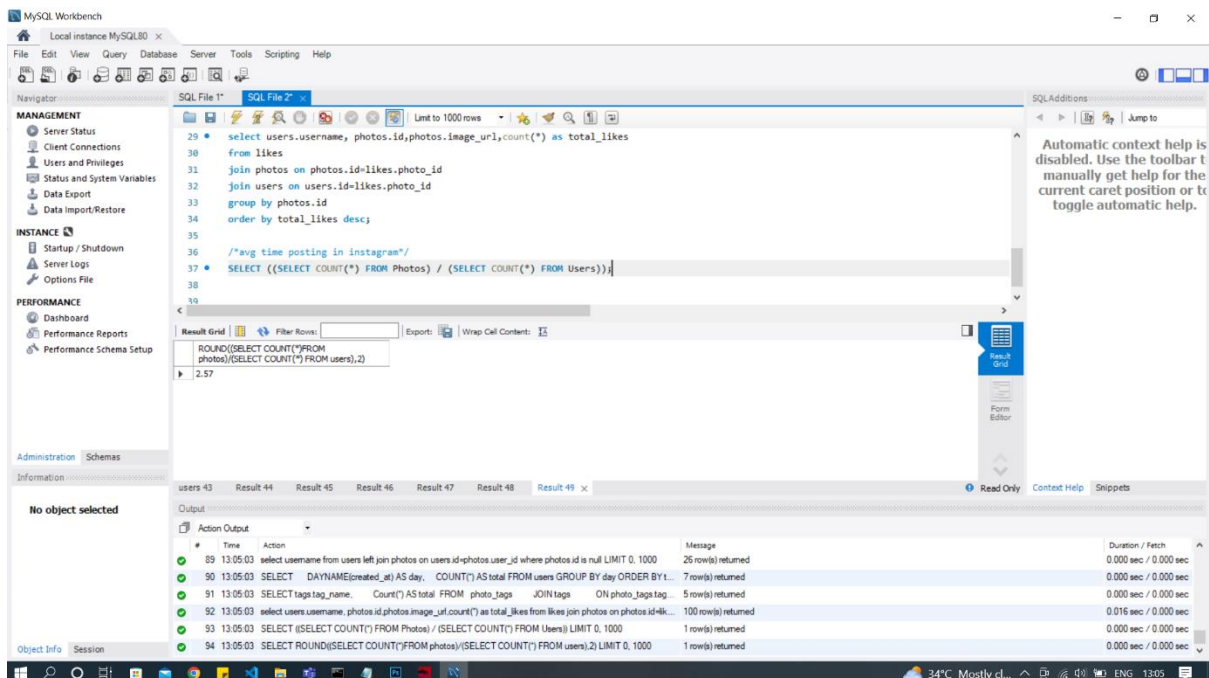
The Results tab shows the following data:

day	total
Thursday	16
Sunday	16
Friday	15
Tuesday	14
Monday	14
Wednesday	13
Saturday	12

The Output tab shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
51	12:56:19	SELECT * FROM Users ORDER BY created_at LIMIT 5	5 row(s) returned	0.000 sec / 0.000 sec
52	12:56:19	select username from users left join photos on users.id=photos.user_id where photos.id is null LIMIT 0, 1000	26 row(s) returned	0.000 sec / 0.000 sec
53	12:56:19	SELECT DAYNAME(created_at) AS day, COUNT(*) AS total FROM users GROUP BY day ORDER BY L...	5 row(s) returned	0.000 sec / 0.000 sec
54	12:58:21	SELECT * FROM Users ORDER BY created_at LIMIT 5	5 row(s) returned	0.000 sec / 0.000 sec
55	12:58:21	select username from users left join photos on users.id=photos.user_id where photos.id is null LIMIT 0, 1000	26 row(s) returned	0.000 sec / 0.000 sec
56	12:58:21	SELECT DAYNAME(created_at) AS day, COUNT(*) AS total FROM users GROUP BY day ORDER BY L...	7 row(s) returned	0.000 sec / 0.000 sec

6th question is Provide how many times does average user posts on Instagram



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
29 select users.username, photos.id,photos.image_url,count(*) as total_likes
30 from likes
31 join photos on photos.id=likes.photo_id
32 join users on users.id=likes.photo_id
33 group by photos.id
34 order by total_likes desc;
35
36 /*avg time posting in instagram*/
37 SELECT ((SELECT COUNT(*) FROM Photos) / (SELECT COUNT(*) FROM Users));
38
```

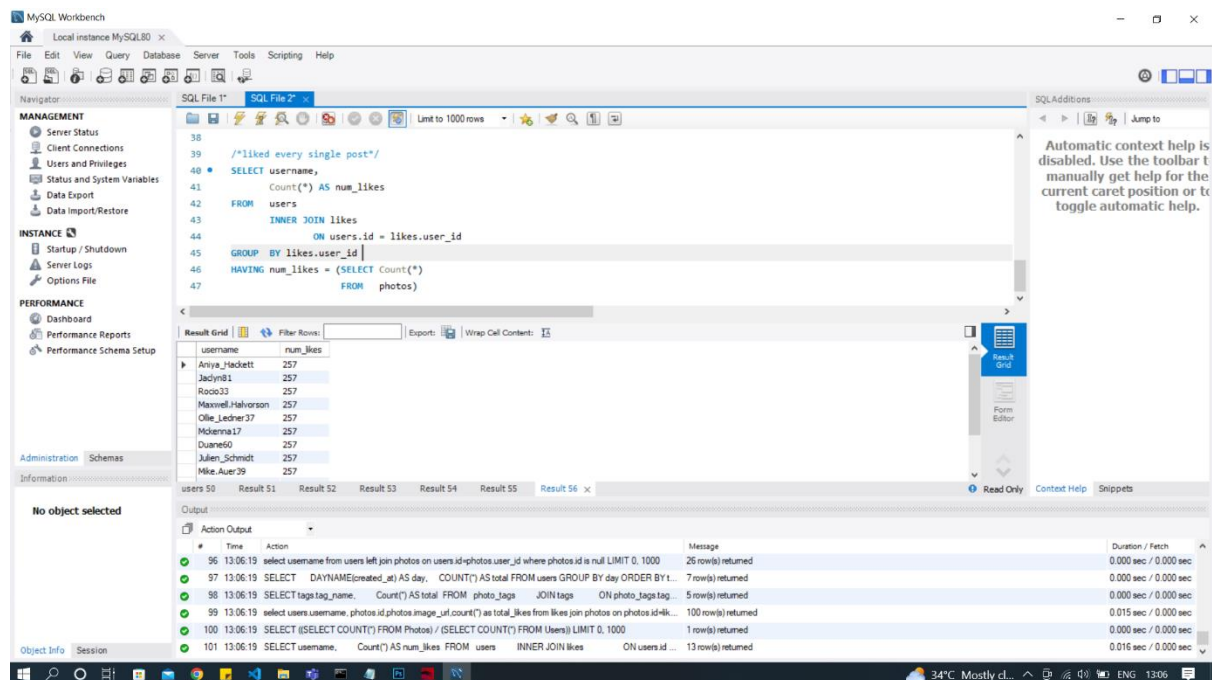
The Results tab shows the following data:

ROUND(SELECT COUNT(*)FROM photos)/(SELECT COUNT(*)FROM users),2
2.57

The Output tab shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
89	13:05:03	select username from users left join photos on users.id=photos.user_id where photos.id is null LIMIT 0, 1000	26 row(s) returned	0.000 sec / 0.000 sec
90	13:05:03	SELECT DAYNAME(created_at) AS day, COUNT(*) AS total FROM users GROUP BY day ORDER BY L...	7 row(s) returned	0.000 sec / 0.000 sec
91	13:05:03	SELECT tags.tag_name, Count(*) AS total FROM photo_tags JOIN tags ON photo_tags.tag...	5 row(s) returned	0.000 sec / 0.000 sec
92	13:05:03	select users.username, photos.id,photos.image_url,count(*) as total_likes from likes join photos on photos.id=lik...	100 row(s) returned	0.016 sec / 0.000 sec
93	13:05:03	SELECT ((SELECT COUNT(*) FROM Photos) / (SELECT COUNT(*) FROM Users)) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
94	13:05:03	SELECT ROUND(SELECT COUNT(*)FROM photos)/(SELECT COUNT(*) FROM users),2) LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

7th question is who liked every single photo on the site



The insights and the knowledge I gained while making this project is how efficiently we can use sql to gain information on certain topics, and how we can retrieve particular data of our choice by writing queries from the whole data.

This project helped me in knowing how to use sql, gave me hands-on practice how to use a database and how to retrieve it, and also helped me to improve my logical thinking and critical thinking. While making this project I had a great experience with sql and whenever I got stuck I referred some videos in trainity. Overall I had a great experience while learning and doing the project.