

# Instagram User Analytics

---

## Project Description

To track how users engage and interact with digital product in an attempt to derive business insights for marketing, product & development teams and measuring user engagement and improve the experience altogether while helping the business grow. Giving an insight by analyzing the given data

## Approach

Taking the dataset into consideration and solving each query using SQL to get an insight for marketing and investor metrics.

## Tech-Stack Used

### Microsoft SQL Server Management Studio

- Version: 18.11.1
- I have already installed SQL server in my laptop and had good hands on experience with the SQL server

### Online editors

- Hacker rank, leetcode, strata scratch, mode.com
- To get a good grip on different platforms, I have used these online editors as well.

## Insights

To put it down in one sentence Gained knowledge on how to analyze each given problem and find relevant solutions to it using SQL.

## Result

I have achieved strong knowledge on SQL while making the project and it helped me to improve my basic knowledge in SQL to advance level and also learned how to deal a problem to find better solution

## Queries

### A) Marketing:

1. `select Top (5) username from dbo.users order by created_at;`
2. `select username from dbo.users where id in ( select user_id from dbo.photos where image_url = " )`
3. `select u.id, u.username, p.image_url from users u, photos p, likes l where u.id=p.user_id and p.id=l.photo_id and u.id=l.user_id and p.id=(select top 1`

photo\_id from dbo.likes group by photo\_id having COUNT(photo\_id)>1  
order by count(photo\_id) desc)

4. select tag\_name from dbo.tags where id= (select top 1 tag\_id from  
dbo.photo\_tags group by tag\_id having COUNT(photo\_id)>1 order by  
count(photo\_id) desc)
5. select TOP 1 DATENAME(WEEKDAY, created\_at)  
,COUNT(DATENAME(WEEKDAY, created\_at)) from dbo.users group by  
DATENAME(WEEKDAY, created\_at) having  
COUNT(DATENAME(WEEKDAY, created\_at))>1

## B) Investor Metrics:

1.
  - a) select avg(a.averageposts) as "average user posts on Instagram" from  
(select user\_id,count(image\_url) as averageposts from dbo.photos group by  
user\_id )a
  - b) select photos,users,(photos/users) as "photos/users" from  
(select count(\*) photos from dbo.photos )photos\_table,  
(select count(\*) users from dbo.users)users\_ table
2. select user\_id from dbo.likes group by user\_id having COUNT(photo\_id)=  
(select count(\*) from dbo.photos)