**You are required to provide a detailed report answering the questions below :**

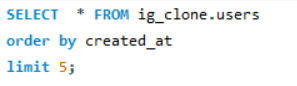
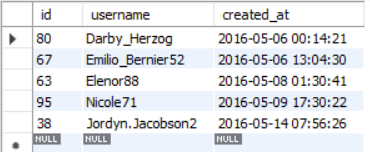
**A) Marketing:**The marketing team wants to launch some campaigns, and they need your help with the following

1. **Rewarding Most Loyal Users:** People who have been using the platform for the longest time.  
   Your Task: Find the 5 oldest users of the Instagram from the database provided

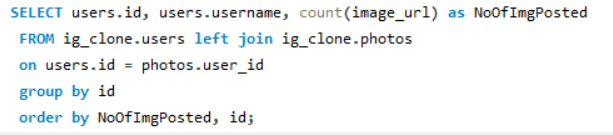
SELECT \* FROM ig\_clone.users

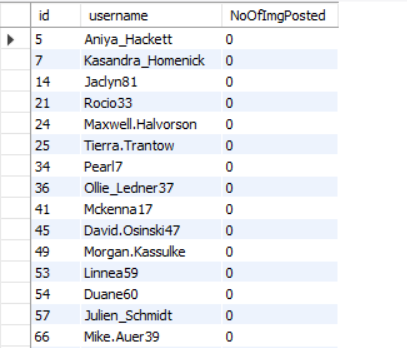
order by created\_at

limit 5;

1. **Remind Inactive Users to Start Posting:** By sending them promotional emails to post their 1st photo.  
   Your Task: Find the users who have never posted a single photo on Instagram







SELECT users.id, users.username, count(image\_url) as NoOfImgPosted

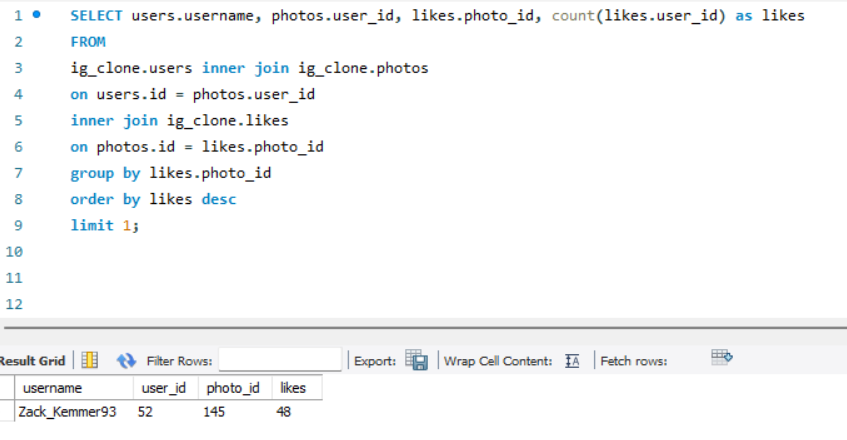
FROM ig\_clone.users left join ig\_clone.photos

on users.id = photos.user\_id

group by id

order by NoOfImgPosted, id;

1. **Declaring Contest Winner:** The team started a contest and the user who gets the most likes on a single photo will win the contest now they wish to declare the winner.  
   Your Task: Identify the winner of the contest and provide their details to the team



SELECT users.username, photos.user\_id, likes.photo\_id, count(likes.user\_id) as likes

FROM

ig\_clone.users inner join ig\_clone.photos

on users.id = photos.user\_id

inner join ig\_clone.likes

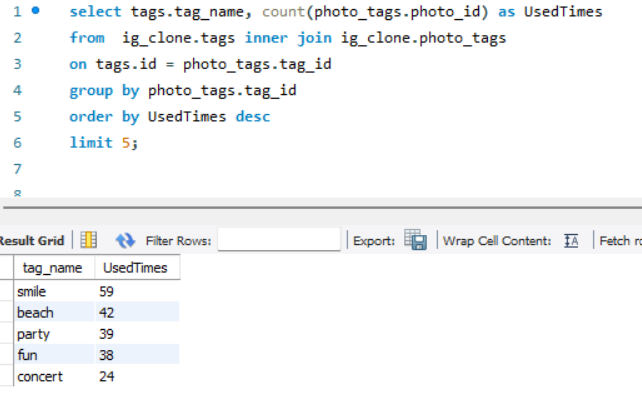
on photos.id = likes.photo\_id

group by likes.photo\_id

order by likes desc

limit 1;

1. **Hashtag Researching:** A partner brand wants to know, which hashtags to use in the post to reach the most people on the platform.  
   Your Task: Identify and suggest the top 5 most commonly used hashtags on the platform



select tags.tag\_name, count(photo\_tags.photo\_id) as UsedTimes

from ig\_clone.tags inner join ig\_clone.photo\_tags

on tags.id = photo\_tags.tag\_id

group by photo\_tags.tag\_id

order by UsedTimes desc

limit 5;

1. **Launch AD Campaign:** The team wants to know, which day would be the best day to launch ADs.  
   Your Task: What day of the week do most users register on? Provide insights on when to schedule an ad campaign

SELECT

weekdays, count(weekdays) AS NoOfDays

FROM

(

SELECT MAX(DAYNAME(CREATED\_AT)) AS weekdays

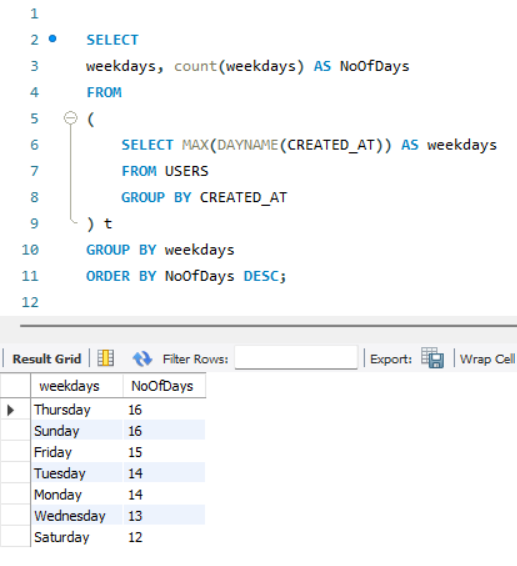
FROM USERS

GROUP BY CREATED\_AT

) t

GROUP BY weekdays

ORDER BY NoOfDays DESC;



**B) Investor Metrics:**Our investors want to know if Instagram is performing well and is not becoming redundant like Facebook, they want to assess the app on the following grounds

1. **User Engagement:** Are users still as active and post on Instagram or they are making fewer posts  
   Your Task: Provide how many times does average user posts on Instagram. Also, provide the total number of photos on Instagram/total number of users

SELECT

AVG(ImgPosts1) as AvgPost

FROM

(

SELECT users.id, users.username,

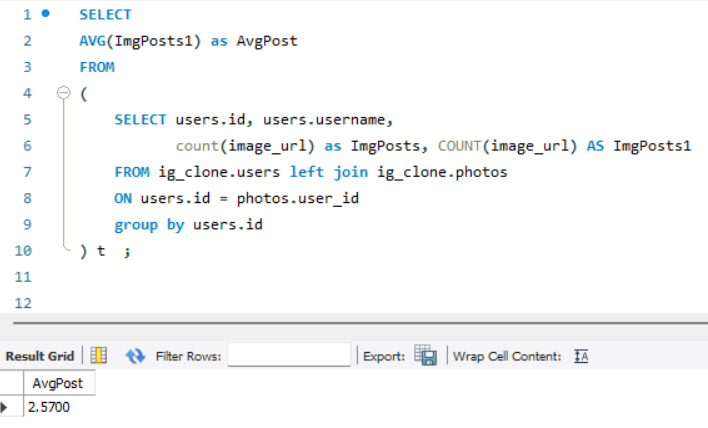
count(image\_url) as ImgPosts, COUNT(image\_url) AS ImgPosts1

FROM ig\_clone.users left join ig\_clone.photos

ON users.id = photos.user\_id

group by users.id

) t ;

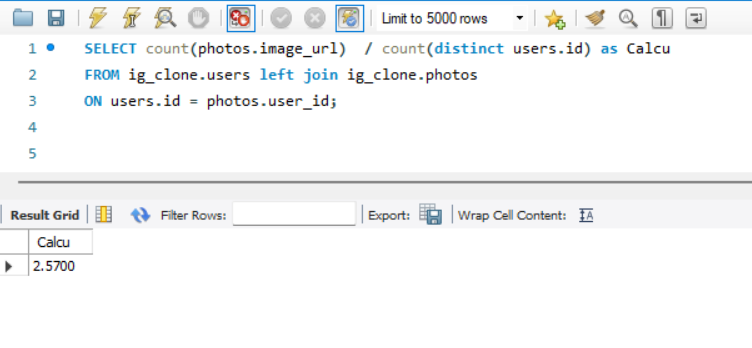


SELECT

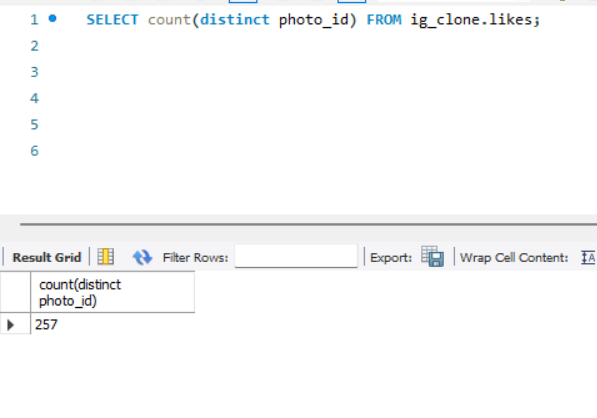
count(photos.image\_url) / count(distinct users.id) as CalCu

FROM ig\_clone.users left join ig\_clone.photos

ON users.id = photos.user\_id;



1. **Bots & Fake Accounts:** The investors want to know if the platform is crowded with fake and dummy accounts  
   Your Task: Provide data on users (bots) who have liked every single photo on the site (since any normal user would not be able to do this).



SELECT count(distinct photo\_id) FROM ig\_clone.likes;

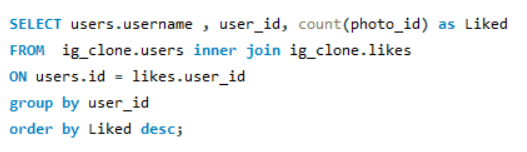
SELECT users.username, user\_id, count(photo\_id) as Liked

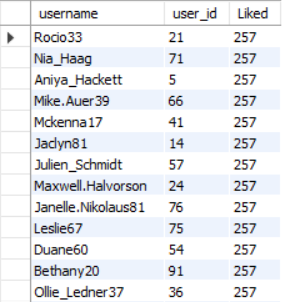
FROM ig\_clone.users inner join ig\_clone.likes

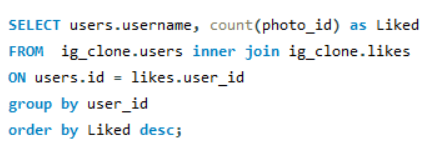
ON users.id = likes.user\_id

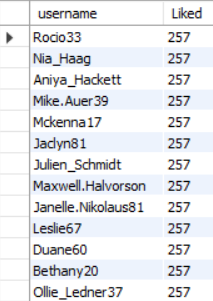
group by user\_id

order by Liked desc;









SELECT users.username as BotAccount, user\_id, count(photo\_id) as Liked

FROM ig\_clone.users inner join ig\_clone.likes

ON users.id = likes.user\_id

group by user\_id

order by Liked desc;

