

# Instagram User Analytics

**-- A) Marketing:**

**-- Find the 5 oldest users of Instagram from the database provided**

```
select * from users
order by created_at
limit 5;
```

**-- Find the users who have never posted a single photo on Instagram**  
**select**

```
    username
from users
left join photos
    on users.id = photos.user_id
where photos.id is NULL;
```

**-- Identify the winner of the contest and provide their details to the team**

```
select
    photos.id,
    photos.image_url,
    count(*) as total
from photos
inner join likes
    on likes.photo_id = photos.id
group by photos.id
order by total desc
limit 1
```

**-- Identify and suggest the top 5 most commonly used hashtags on the platform**

```
select
    tags.tag_name,
    count(*) as total
from photo_tags
join tags
    on photo_tags.tag_id = tags.id
group by tags.id
order by total desc
limit 5
```

**-- What day of the week do most users register on?. Provide insights on when to schedule an ad campaign**

```
select
    to_char(created_at,'Day') as day,
    count(*) as total
from users
group by day
order by total desc;
```

**-- B) Investor Metrics:**

**-- Provide how many times does average user posts on Instagram. Also, provide the total number of photos on Instagram/total number of users**

```
select  
    (select count(*) from photos)/(select count(*) from users);
```

**-- Provide data on users (bots) who have liked every photo on the site (since any normal user would be unable to do this).**

```
select  
  
    username,  
    count(*) as likes  
from users  
inner join likes  
    on users.id = likes.user_id  
group by likes.user_id,users.username  
having count(likes) =(select count(*)from photos)
```