SQL project

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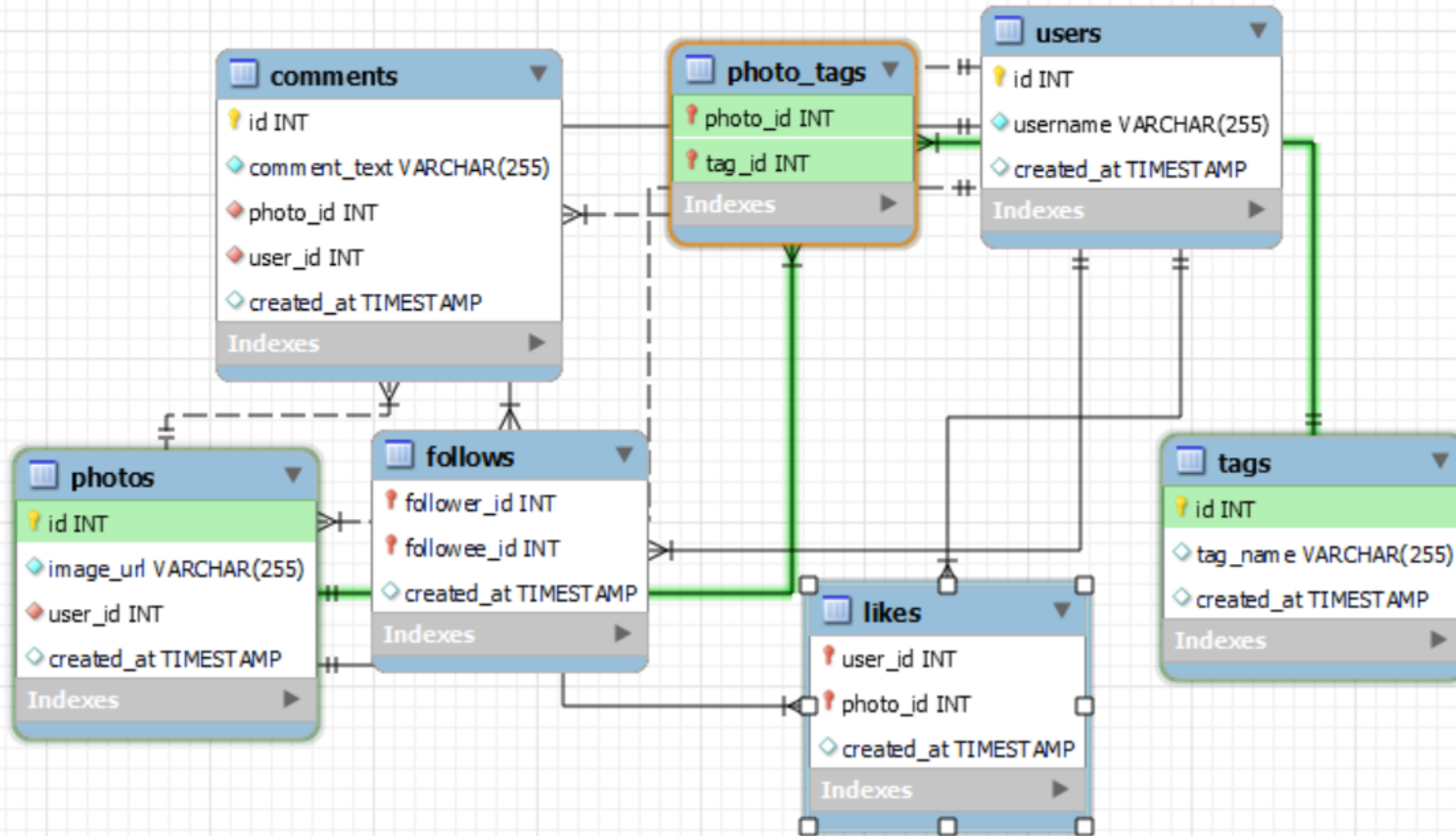- Problem Statement
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Introduction

Instagram allows users to edit and upload photos and short videos through a mobile app. Users can add a caption to each of their posts and use hashtags and location-based geotags to index these posts and make them searchable by other users within the app. Instagram is a free photo and video sharing app available on iPhone and Android. People can upload photos or videos to our service and share them with their followers or with a select group of friends. So Instagram wants information of their users to award them basis on their usage.
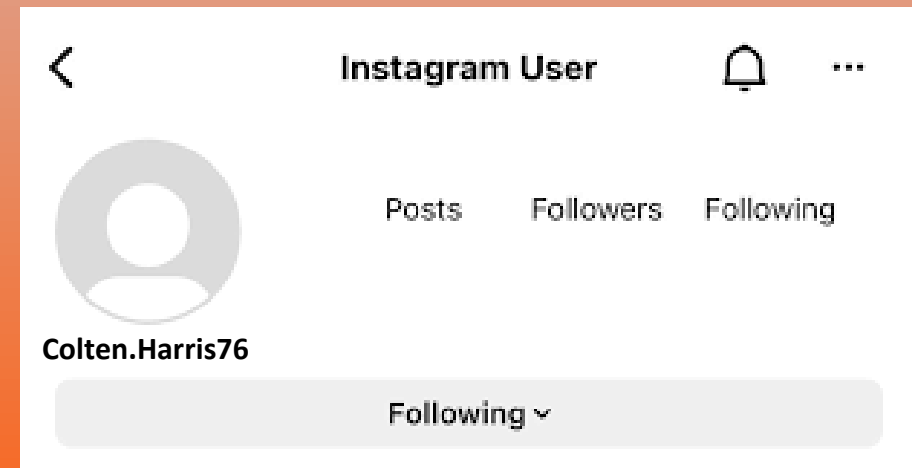
Entity Relationship Diagram

Problem Statement

Can you help me find the users whose name starts with c and ends with any number and have posted the photos as well as liked the photos.

```
select id, username user_Starts_with_c from users
where username regexp '^c.*[0-9]$' and id in(select user_id from photos
where user_id in(select user_id from likes));
```

id	user_Starts_with_c
78	Colten.Harris76

Instagram User

Posts   Followers   Following
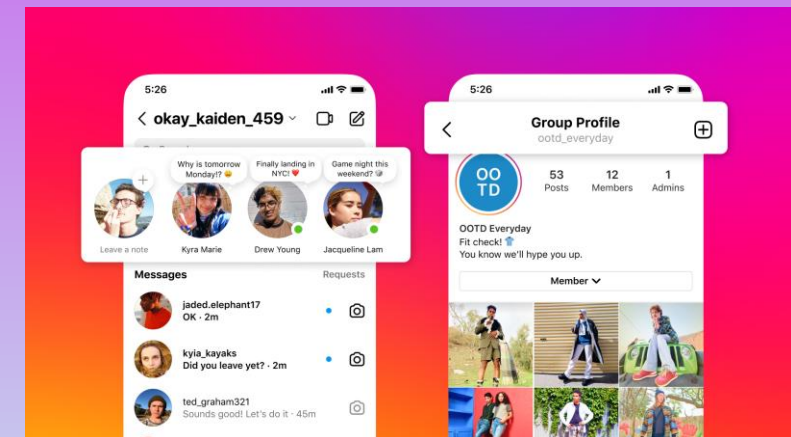
Colten.Harris76

Following ˅

Problem Statement

We want to reward the user who has been around the longest, Find the 5 oldest users.

```
  select id, username Oldusers, created_at from users
order by created_at asc
limit 5;
```

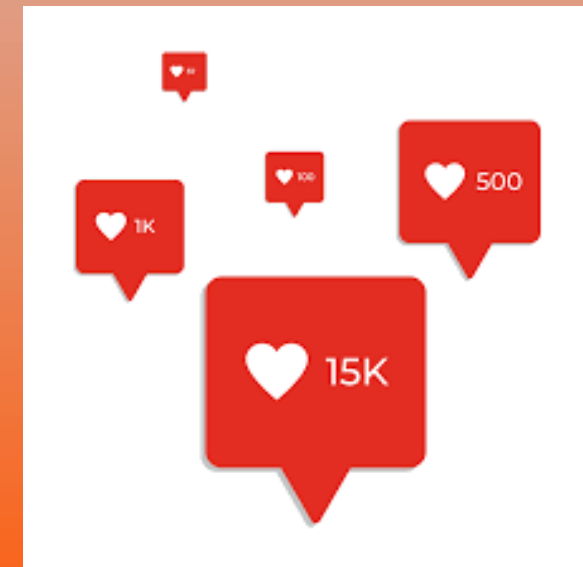| id	Oldusers	created_at
80	Darby_Herzog	2016-05-06 00:14:21
67	Emilio_Bernier52	2016-05-06 13:04:30
63	Elenor88	2016-05-08 01:30:41
95	Nicole71	2016-05-09 17:30:22
38	Jordyn.Jacobson2	2016-05-14 07:56:26

Problem Statement

Suppose you are running a contest to find out who got the most likes on a photo. Find out who won.

```sql
select l.user_id, u.username, count(l.user_id) mostlikes from likes l
inner join users u on l.user_id = u.id
group by l.user_id
order by mostlikes desc;
```

user_id	username	mostlikes
54	Duane60	257
36	Ollie_Ledner37	257
21	Rocio33	257
71	Nia_Haag	257
5	Aniya_Hackett	257

Problem Statement

A brand wants to know which hashtag to use on a post, and find the top 5 most used hashtags.

```sql
select t.id, tag_name Toptags, count(pt.tag_id) Total_tags from tags t
inner join photo_tags pt on t.id = pt.tag_id
group by pt.tag_id
order by Total_tags desc
limit 5;
```

id	Toptags	Total_tags
21	smile	59
20	beach	42
17	party	39
13	fun	38
18	concert	24

Problem Statement

To find out if there are bots, find users who have liked every single photo on the site.

```
 select user_id, u.username Bot_user, count(user_id) TOTAL_PICS
from likes
join users u on likes.user_id = u.id
group by user_id
having TOTAL_PICS = 257;
limit 5;
```

user_id	Bot_user
5	Aniya_Hackett
91	Bethany20
54	Duane60
14	Jaclyn81
76	Janelle.Nikolaus81

user_id	Bot_user
41	Mckenna17
66	Mike.Auer39
71	Nia_Haag
36	Ollie_Ledner37
21	Rocio33

Bot_user

Problem Statement

Find the users who have created instagramid in may and select top 5 newest joinees from it.

```sql
select id, username, created_at Joined_on from users
where month(created_at) = 5
order by Joined_on desc
limit 5;
```

id	username	Joined_on
11	Justina.Gaylord27	2017-05-04 16:32:16
58	Aurelie71	2016-05-31 06:20:57
40	Rafael.Hickle2	2016-05-19 09:51:26
71	Nia_Haag	2016-05-14 15:38:50
38	Jordyn.Jacobson2	2016-05-14 07:56:26

Problem Statement

Demonstrate the top 30 usernames to the company who have posted photos in the range of 3 to 5.

```
select p.user_id,u.username, count(p.user_id) posts from photos p
inner join users u on p.user_id = u.id
group by user_id
having posts between 3 and 5
order by posts desc
limit 30;
```

user_id	username	posts
65	Adelle96	5
51	Mariano_Koch3	5
13	Alexandro35	5
6	Travon.Waters	5
33	Yvette.Gottlieb91	5
47	Harrison.Beatty50	5
52	Zack_Kemmer93	5
78	Colten.Harris76	5
43	Janet.Armstrong	5
26	Josianne.Friesen	5
11	Justina.Gaylord27	5
72	Kathryn80	5

user_id	username	posts
64	Florence99	5
1	Kenton_Kirlin	5
2	Andre_Purdy85	4
16	Annalise.McKenzi...	4
15	Billy52	4
28	Dario77	4
8	Tabitha_Schambe...	4
46	Malinda_Streich	4
32	Irwin.Larson	4
99	Alek_Watsica	3
4	Arely_Bogan63	3
67	Emilio_Bernier52	3

Insights

- Top Posts: The posts that generated the most reach are 5 users.
- Top Hashtags: The Instagram Stories posts that generated the most hashtags are smile, beach, party, fun, concert .
- Top IGTV Videos: The IGTV videos that generated the most reach.
- Impressions: How many times your posts were seen.
- Bot users: There are 10 Bot users in the dataset.

Conclusion

Instagram has many user accounts and it is making big impact in social media platform. There so much content in the Instagram, Users have been increasing day by day. There is a usage with the bot accounts they can access every posts in the Instagram easily with help of account data we can go through which ever is needed. Users are making ads and influencing others using Instagram platform. This can be main advantage for both sides. In terms of safety also Instagram making good privacy for private accounts. Only public accounts can access data easily by the other user.

Log Out?

Are you sure you want to log out of your account?

Log Out