

```

use ig_clone
select * from users
select * from photos

select * from tags
select * from photo_tags

select * from follows
select * from comments

```

--A)Marketing Analysis

--Query1

--Identify the five oldest users on Instagram from the provided database.

```

select top 5 * from users
order by created_at desc;

```

131 %

Results Messages			
	id	username	created_at
1	11	Justina.Gaylord27	2017-05-04 16:32:15.577
2	6	Travon.Waters	2017-04-30 13:26:14.497
3	85	Milford_Gleichner42	2017-04-30 07:50:51.280
4	19	Hailee26	2017-04-29 18:53:39.650
5	24	Maxwell.Halvorson	2017-04-18 02:32:43.597

--Query2

--Identify users who have never posted a single photo on Instagram.

```

select u.id,u.username ,count(p.user_id) from users as u left join photos as p
on u.id=p.user_id
group by u.id, u.username
having count(p.user_id)=0
--or

```

```

select u.id,u.username from users as u left join photos as p
on u.id=p.user_id
group by u.id, u.username
having count(p.user_id)=0

```

	id	username
1	5	Aniya_Hackett
2	7	Kassandra_Homenick
3	14	Jaclyn81
4	21	Rocio33
5	24	Maxwell.Halvorson
6	25	Tierra.Trantow
7	34	Pearl7
8	36	Ollie_Ledner37
9	41	Mckenna17
10	45	David.Osinski47
11	49	Morgan.Kassulke
12	53	Linnea59
13	54	Duane60
14	57	Julien_Schmidt
15	66	Mike.Auer39
16	68	Franco_Keebler64
17	71	Nia_Haag
18	74	Hulda.Macejkovic
19	75	Leslie67
20	76	Janelle.Nikolaus81
21	80	Darby_Herzog
22	81	Esther.Zulauf61
23	83	Bartholome.Bernha...
24	89	Jessyca_West
25	90	Esmeralda.Mraz57
26	91	Bethany20

--Query3

---The team has Organized a contest where the user with the Most like on single photo wins.

```
select top 1 photo_id ,count(photo_id) from likes
group by photo_id
order by count(photo_id)desc
```

	photo_id	(No column name)
1	145	48

```
--Find most like photo userid
select user_id from photos where id=
(select top 1 photo_id from likes
group by photo_id
order by count(photo_id)desc)
```

	user_id
1	52

---Find most like photo username

```
select username from users where id=
(select user_id from photos where id=
(select top 1 photo_id from likes
```

```
group by photo_id
order by count(photo_id)desc))
```

131 %

Results		Messages
1	username	
	Zack_Kemmer93	

--Second Way

--Determine the winner of the contest and provide their details to the team of most like photo

```
select a.id,a.username from users as a inner join
(select user_id from photos where id=
(select top 1 photo_id from likes
group by photo_id
order by count(photo_id)desc)) as b
on a.id=b.user_id
```

131 %

Results		Messages
	id	username
1	52	Zack_Kemmer93

--Query-4

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

```
select top 5 t.id ,t.tag_name,count(p.tag_id) from tags as t left join photo_tags as
p
on t.id=p.tag_id
group by p.tag_id,t.id ,t.tag_name
order by count(p.tag_id)desc,t.tag_name asc
```

--or

```
select top 5 t.id ,t.tag_name,count(p.photo_id) from tags as t left join photo_tags as
p
on t.id=p.tag_id
group by t.id,t.tag_name
order by count(p.photo_id) desc
```

131 %

Results				Messages
	id	tag_name	(No column name)	
1	21	smile	59	
2	20	beach	42	
3	17	party	39	
4	13	fun	38	
5	18	concert	24	

--Query-5

--Determine the day of the week when most users register on Instagram. Provide insights on when to schedule an ad campaign.

```
select top 2 count(id) as user_reg,datetime(dw,created_at) as Day from users
group by datetime(dw,created_at)
order by count(id) desc
select * from users;
```

Results Messages		
	user_reg	Day
1	16	Sunday
2	16	Thursday

--(B)-Investor Metrics:

--Query 1-

--Calculate the average number of posts per user on Instagram. Also, provide the total

--number of photos on Instagram divided by the total number of users.

```
select USER_ID, count(id) as post_count from photos group by user_id having
count(id) < (
select (count(id)/count(distinct user_id)) as avrage from photos)
```

Results Messages		
	USER_ID	post_coun
1	18	1
2	19	2
3	20	1
4	22	1
5	27	1
6	30	2
7	31	1
8	35	2
9	37	1
10	38	2
11	39	1
12	40	1
13	48	1
14	55	1
15	56	1
16	60	2
17	61	1
18	62	2
19	69	1
20	70	1
21	73	1
22	79	1
23	82	2
24	84	2
25	85	2
26	93	2
27	94	1
28	95	2
29	97	2
30	98	1
31	100	2

--Query 2-

-- Your Task: Identify users (potential bots) who have liked every single photo on the site, as this is not

--typically possible for a normal user

```
select user_id,count(photo_id) from likes
group by user_id
```

having count(photo_id)=(select count(id) from

131 %

Results			Messages
	user_id	(No column name)	
1	5	257	
2	14	257	
3	21	257	
4	24	257	
5	36	257	
6	41	257	
7	54	257	
8	57	257	
9	66	257	
10	71	257	
11	75	257	
12	76	257	
13	91	257	