/\*We want to reward our users who have been around the longest.

Find the 5 oldest users.\*/

SELECT \* FROM users

ORDER BY created\_at

LIMIT 5;

/\*What day of the week do most users register on?

We need to figure out when to schedule an ad campgain\*/

SEL,ECT date\_format(created\_at,'%W') AS 'day of the week', COUNT(\*) AS 'total registration'

FROM users

GROUP BY 1

ORDER BY 2 DESC;

/\*version 2\*/

SELECT

DAYNAME(created\_at) AS day,

COUNT(\*) AS total

FROM users

GROUP BY day

ORDER BY total DESC

LIMIT 2;

/\*We want to target our inactive users with an email campaign.

Find the users who have never posted a photo\*/

SELECT username

FROM users

LEFT JOIN photos ON users.id = photos.user\_id

WHERE photos.id IS NULL;

/\*We're running a new contest to see who can get the most likes on a single photo.

WHO WON??!!\*/

SELECT users.username,photos.id,photos.image\_url,COUNT(\*) AS Total\_Likes

FROM likes

JOIN photos ON photos.id = likes.photo\_id

JOIN users ON users.id = likes.user\_id

GROUP BY photos.id

ORDER BY Total\_Likes DESC

LIMIT 1;

/\*version 2\*/

SELECT

username,

photos.id,

photos.image\_url,

COUNT(\*) AS total

FROM photos

INNER JOIN likes

ON likes.photo\_id = photos.id

INNER JOIN users

ON photos.user\_id = users.id

GROUP BY photos.id

ORDER BY total DESC

LIMIT 1;

/\*Our Investors want to know...

How many times does the average user post?\*/

/\*total number of photos/total number of users\*/

SELECT ROUND((SELECT COUNT(\*)FROM photos)/(SELECT COUNT(\*) FROM users),2);

/\*user ranking by postings higher to lower\*/

SELECT users.username,COUNT(photos.image\_url)

FROM users

JOIN photos ON users.id = photos.user\_id

GROUP BY users.id

ORDER BY 2 DESC;

/\*Total Posts by users (longer versionof SELECT COUNT(\*)FROM photos) \*/

SELECT SUM(user\_posts.total\_posts\_per\_user)

FROM (SELECT users.username,COUNT(photos.image\_url) AS total\_posts\_per\_user

FROM users

JOIN photos ON users.id = photos.user\_id

GROUP BY users.id) AS user\_posts;

/\*total numbers of users who have posted at least one time \*/

SELECT COUNT(DISTINCT(users.id)) AS total\_number\_of\_users\_with\_posts

FROM users

JOIN photos ON users.id = photos.user\_id;

/\*A brand wants to know which hashtags to use in a post

What are the top 5 most commonly used hashtags?\*/

SELECT tag\_name, COUNT(tag\_name) AS total

FROM tags

JOIN photo\_tags ON tags.id = photo\_tags.tag\_id

GROUP BY tags.id

ORDER BY total DESC;

/\*We have a small problem with bots on our site...

Find users who have liked every single photo on the site\*/

SELECT users.id,username, COUNT(users.id) As total\_likes\_by\_user

FROM users

JOIN likes ON users.id = likes.user\_id

GROUP BY users.id

HAVING total\_likes\_by\_user = (SELECT COUNT(\*) FROM photos);

/\*We also have a problem with celebrities

Find users who have never commented on a photo\*/

SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NULL;

SELECT COUNT(\*) FROM

(SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NULL) AS total\_number\_of\_users\_without\_comments;

/\*Mega Challenges

Are we overrun with bots and celebrity accounts?

Find the percentage of our users who have either never commented on a photo or have commented on every photo\*/

SELECT tableA.total\_A AS 'Number Of Users who never commented',

(tableA.total\_A/(SELECT COUNT(\*) FROM users))\*100 AS '%',

tableB.total\_B AS 'Number of Users who likes every photos',

(tableB.total\_B/(SELECT COUNT(\*) FROM users))\*100 AS '%'

FROM

(

SELECT COUNT(\*) AS total\_A FROM

(SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NULL) AS total\_number\_of\_users\_without\_comments

) AS tableA

JOIN

(

SELECT COUNT(\*) AS total\_B FROM

(SELECT users.id,username, COUNT(users.id) As total\_likes\_by\_user

FROM users

JOIN likes ON users.id = likes.user\_id

GROUP BY users.id

HAVING total\_likes\_by\_user = (SELECT COUNT(\*) FROM photos)) AS total\_number\_users\_likes\_every\_photos

)AS tableB;

/\*Find users who have ever commented on a photo\*/

SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NOT NULL;

SELECT COUNT(\*) FROM

(SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NOT NULL) AS total\_number\_users\_with\_comments;

/\*Are we overrun with bots and celebrity accounts?

Find the percentage of our users who have either never commented on a photo or have commented on photos before\*/

SELECT tableA.total\_A AS 'Number Of Users who never commented',

(tableA.total\_A/(SELECT COUNT(\*) FROM users))\*100 AS '%',

tableB.total\_B AS 'Number of Users who commented on photos',

(tableB.total\_B/(SELECT COUNT(\*) FROM users))\*100 AS '%'

FROM

(

SELECT COUNT(\*) AS total\_A FROM

(SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NULL) AS total\_number\_of\_users\_without\_comments

) AS tableA

JOIN

(

SELECT COUNT(\*) AS total\_B FROM

(SELECT username,comment\_text

FROM users

LEFT JOIN comments ON users.id = comments.user\_id

GROUP BY users.id

HAVING comment\_text IS NOT NULL) AS total\_number\_users\_with\_comments

)AS tableB