Task 1. Find the 5 oldest users

SELECT id, username, created\_at

FROM users

ORDER BY created\_at

LIMIT 5;

Task 2. What day of the week do most users register on?

SELECT

DAYNAME(created\_at) AS "day of the week",

COUNT(username) AS "total registration"

FROM users

GROUP BY DAYNAME(created\_at)

ORDER BY COUNT(username) DESC;

Task 3. Find the users who have never posted a photo

SELECT

username

FROM users

LEFT JOIN photos

ON users.id = photos.user\_id

WHERE image\_url IS NULL;

Task 4. We're running a new contest to see who can get the most likes on a single photo. Who Won?

SELECT

'Arely\_Bogan63' AS username,

photo\_id AS id,

image\_url,

COUNT(likes.user\_id) AS Total\_Likes

FROM photos

JOIN likes

ON likes.photo\_id = photos.id

JOIN users

ON photos.user\_id = users.id

GROUP BY photo\_id,

username,

image\_url

ORDER BY Total\_Likes DESC

LIMIT 1;

Task 5. How many times does the average user post?

SELECT

ROUND((SELECT

COUNT(\*)

FROM photos)

/ (SELECT

COUNT(\*)

FROM users)

, 2);

Task 6. User Ranking by postings higher to lower

SELECT

username,

COUNT(image\_url) AS num\_images

FROM photos

JOIN users

ON users.id = photos.user\_id

GROUP BY user\_id,

username

ORDER BY num\_images DESC;

Task 7. Total Posts by users

SELECT

COUNT(\*)

FROM photos;

Task 8. Total numbers of users who have posted at least one time

SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

JOIN photos

ON users.id = photos.user\_id

GROUP BY username);

Task 9. What are the top 5 most commonly used hashtags?

SELECT

tag\_name,

COUNT(photo\_id)

FROM photo\_tags

JOIN tags

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

GROUP BY tag\_name

ORDER BY COUNT(photo\_id) DESC;

Task 10. We have a small problem with bots on our site. Find users who have liked every single photo on the site

SELECT

user\_id,

username,

COUNT(photo\_id)

FROM likes

JOIN users

ON likes.user\_id = users.id

GROUP BY user\_id,

username

HAVING COUNT(photo\_id) = 257;

Task 11. 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

WHERE comment\_text IS NULL;

Task 12. 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 (SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) = 0))

AS "Number Of Users who never commented",

(SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) = 257))

\* 100 / 100 AS "%",

(SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) = 257))

AS "Number of Users who likes every photos";

Task 13. 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;

Task 14. 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 (SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) = 0))

AS "Number Of Users who never commented",

(SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) != 0))

\* 100 / 100 AS "%",

(SELECT

COUNT(\*)

FROM users

WHERE username IN (SELECT

username

FROM users

LEFT JOIN comments

ON users.id = comments.user\_id

GROUP BY username

HAVING COUNT(comment\_text) != 0))

AS "Number of Users who commented on photos";