

1) View users' all posts and display the number of likes and number of comments to that post.

```
SELECT p.post_id,count(*) total_comments FROM "socialNetworkSystem"."Posts" p
LEFT JOIN "socialNetworkSystem"."PostComments" pc
ON p.post_id = pc.post_id
WHERE p.post_id
IN
(SELECT post_id FROM "socialNetworkSystem"."Posts" WHERE user_id = 1)
GROUP BY p.post_id;
```

```
SELECT p.post_id,count(*) total_likes FROM "socialNetworkSystem"."Posts" p
LEFT JOIN "socialNetworkSystem"."PostLikes" pl
ON p.post_id = pl.post_id
WHERE p.post_id
IN
(SELECT post_id FROM "socialNetworkSystem"."Posts" WHERE user_id = 1)
GROUP BY p.post_id;
```

```
SELECT pc.post_id,pc.comment_id,count(cl.user_id) total_comment_likes FROM
"sociAlNetworkSystem"."PostComments" pc
LEFT JOIN "socialNetworkSystem"."CommentLikes" cl
ON pc.comment_id = cl.comment_id
WHERE pc.post_id
IN
(SELECT post_id FROM "socialNetworkSystem"."Posts" WHERE user_id = 1)
GROUP BY pc.post_id,pc.comment_id;
```

2) Display the comments posted by the user.

```
SELECT post_id, comment_content, timestamp
FROM "socialNetworkSystem"."PostComments"
WHERE user_id = 10;
```

3) Display the page name, number of followers of that page, and admin of that page.

```
SELECT page_name, u.first_name || ' ' || u.laSt_name AS Admin, COUNT(DISTINCT f.user_id) AS
total_followers
FROM "socialNetworkSystem"."Pages" AS p
LEFT JOIN "socialNetworkSystem"."Followers" AS f
ON p.page_id = f.page_id
JOIN "socialNetworkSystem"."Users" AS u
ON p.user_id = u.user_id
WHERE p.page_id = 15
GROUP BY p.page_name, u.first_name, u.laSt_name, u.user_id;
```

4) Display the members of the particular page.

```
SELECT u.user_id, u.first_name || ' ' || u.laSt_name AS username
FROM "socialNetworkSystem"."Followers" AS p
JOIN "socialNetworkSystem"."Users" AS u
ON u.user_id = p.user_id
WHERE p.page_id = 1
```

5) Display posts that don't have any likes.

```
SELECT p.post_id, COUNT(pl.user_id) total_likes
FROM "socialNetworkSystem"."Posts" p
LEFT JOIN "socialNetworkSystem"."PostLikes" pl
ON pl.post_id = p.post_id
GROUP BY p.post_id
HAVING COUNT(pl.user_id) < 1
```

6) Display posts that don't have any comments.

```
SELECT p.post_id, COUNT(pc.user_id) total_comments
FROM "socialNetworkSystem"."Posts" p
LEFT JOIN "socialNetworkSystem"."PostComments" pc
```

```
ON pc.post_id = p.post_id
GROUP BY p.post_id
HAVING COUNT(pc.user_id) < 1
```

7) Display posts to a particular page and also display the user's name who posted it in the latest to the old order.

```
SELECT u.user_id,p.post_id, u.first_name || ' ' || u.last_name username
FROM "socialNetworkSystem"."Posts" p
JOIN "socialNetworkSystem"."Users" u
ON u.user_id = p.user_id
WHERE page_id = 1
ORDER BY timestamp DESC
```

8) Display all the details of a particular post. (likes, comments, comment likes)

```
SELECT * FROM "socialNetworkSystem"."Posts" p
JOIN "socialNetworkSystem"."PostComments" pc
ON pc.post_id = p.post_id
WHERE p.post_id = 1
```

```
SELECT count(*) total_likes
FROM "socialNetworkSystem"."PostLikes"
WHERE post_id = 1
```

```
SELECT pc.comment_id ,COUNT(cl.user_id) total_comment_likes
FROM "socialNetworkSystem"."PostComments" pc
LEFT JOIN "socialNetworkSystem"."CommentLikes" cl
ON pc.comment_id = cl.comment_id
WHERE pc.comment_id IN
(SELECT comment_id FROM "socialNetworkSystem"."PostComments"
WHERE post_id = 1)
GROUP BY pc.comment_id
```

9) Display all information about a particular user.

```
SELECT * FROM "socialNetworkSystem"."Users"  
WHERE user_id = 1
```

10) Display user notifications of a particular user from the latest to the old.

```
SELECT * FROM "socialNetworkSystem"."Notifications" n  
JOIN "socialNetworkSystem"."UserNotification" un  
ON n.notification_id = un.notification_id  
WHERE user_id = 1  
ORDER BY timestamp DESC
```

11) Display the saved post of a particular user from the latest to the old.

```
SELECT * FROM "socialNetworkSystem"."SavedPosts"  
WHERE user_id = 1  
ORDER BY timestamp DESC
```

12) Display all friends and count the total friend of a particular user.

```
SELECT COUNT(*) FROM "socialNetworkSystem"."Friends" f  
JOIN "socialNetworkSystem"."Users" u  
ON u.user_id = f.friend_id  
WHERE (f.user_id = 2 or f.friend_id = 2) AND request_status = '1'
```

13) Display all pages having more than 1000 followers.

```
SELECT * FROM "socialNetworkSystem"."Pages"  
WHERE page_id IN  
(SELECT f.page_id FROM "socialNetworkSystem"."Pages" p  
JOIN "socialNetworkSystem"."Followers" f  
ON p.page_id = f.page_id  
GROUP BY f.page_id  
HAVING COUNT(f.user_id) > 1000)
```

```
HAVING COUNT(f.user_id) > 1000)
```

14) Display all users who have birthdays today.

```
SELECT first_name || ' ' || last_name AS user_name FROM "socialNetworkSystem"."Users"  
WHERE EXTRACT(MONTH FROM dob) = EXTRACT(MONTH FROM CURRENT_DATE) AND  
EXTRACT(DAY FROM dob) = EXTRACT(DAY FROM CURRENT_DATE)
```

15) Display all users who are older than 18 years.

```
SELECT * FROM "socialNetworkSystem"."Users"  
WHERE EXTRACT(YEAR FROM age(CURRENT_DATE,dob)) > 18
```

16) Display all this month's saved posts of a particular user.

```
SELECT * FROM "socialNetworkSystem"."SavedPosts" sp  
JOIN "socialNetworkSystem"."Posts" p  
ON p.post_id = sp.post_id  
WHERE EXTRACT(MONTH FROM sp.timestamp) = EXTRACT(MONTH FROM CURRENT_DATE)  
AND EXTRACT(YEAR FROM sp.timestamp) = EXTRACT(YEAR FROM CURRENT_DATE)
```

17) Display all last 7 saved posts of a particular user.

```
SELECT * FROM "socialNetworkSystem"."SavedPosts" sp  
JOIN "socialNetworkSystem"."Posts" p  
ON p.post_id = sp.post_id  
WHERE (CURRENT_DATE::date - sp.timestamp::timestamp::date) < 60
```

18) Display all friend requests of a particular user.

```
SELECT u.user_id, u.first_name || ' ' || u.last_name username  
FROM "socialNetworkSystem"."Friends" f  
JOIN "socialNetworkSystem"."Users" u
```

```
ON u.user_id = f.user_id
WHERE (f.friend_id = 1) AND request_status = '2'
```

UNION

```
SELECT u.user_id, u.first_name || ' ' || u.last_name username
FROM "socialNetworkSystem"."Friends" f
JOIN "socialNetworkSystem"."Users" u
ON u.user_id = f.friend_id
WHERE (f.user_id = 1) AND request_status = '2'
```

19) Compute the age of a particular user.

```
SELECT AGE(CURRENT_DATE,dob) FROM "socialNetworkSystem"."Users"
WHERE user_id = 2
```

20) Display all friends' details of a particular user.

```
SELECT u.first_name || ' ' || u.lAst_name username,u.email,u.phONe_number,u.gender,u.dob
FROM "socialNetworkSystem"."Friends" f
JOIN "socialNetworkSystem"."Users" u
ON u.user_id = f.user_id
WHERE (f.friend_id = 2) AND request_status = '1'
```

UNION

```
SELECT u.first_name || ' ' || u.lAst_name username,u.email,u.phONe_number,u.gender,u.dob
FROM "socialNetworkSystem"."Friends" f
JOIN "socialNetworkSystem"."Users" u
ON u.user_id = f.friend_id
WHERE (f.user_id = 2) AND request_status = '1'
```

21) Display messages of a particular user from latest to old.

```
SELECT message,timestamp FROM "socialNetworkSystem"."Messages"  
WHERE ((sender = 11 AND receiver = 14)  
OR (sender = 14 AND receiver = 11))  
ORDER BY timestamp DESC
```

22) Display all comment details from a particular comment.

```
SELECT * FROM "socialNetworkSystem"."PostComments"  
WHERE comment_id = 1
```