






1. List all the users who follow the user 'cristiano'.

SQLQuery1.sql - D:\R7SGNE\DUAN (76)) *  

```
SELECT u.user_id, u.username
FROM Follow f
JOIN [User] u ON f.follower_id = u.user_id
WHERE f.followed_id = (SELECT user_id FROM [User] WHERE username = 'cristiano');
```

100 % 

 Results  Messages

	user_id	username
1	2	messi
2	8	user1
3	9	user2
4	10	user3

2. List all the posts and stories made in the last week by users followed by user 'messi'.

SQLQuery1.sql - D:\R7SGNE\DUAN (76)* - X

```
SELECT p.post_id, u.username, p.caption, p.created_at
FROM Post p
JOIN [User] u ON p.user_id = u.user_id
WHERE p.user_id IN (SELECT followed_id FROM Follow WHERE follower_id = (SELECT user_id FROM [User] WHERE username = 'messi'))
AND p.created_at >= DATEADD(DAY, -7, GETDATE());

SELECT s.story_id, u.username, s.created_at
FROM Story s
JOIN [User] u ON s.user_id = u.user_id
WHERE s.user_id IN (SELECT followed_id FROM Follow WHERE follower_id = (SELECT user_id FROM [User] WHERE username = 'messi'))
AND s.created_at >= DATEADD(DAY, -7, GETDATE());
```

100 %

Results Messages

	post_id	username	caption	created_at
1	6	cristiano	Win win win!	2025-02-16 19:22:54.723

	story_id	username	created_at
1	6	cristiano	2025-02-19 01:23:29.940

3. List all posts and stories where user 'serenawilliams' has liked or commented.

SQLQuery1.sql - D:\R7SGNE\DUAN (76))*

```
SELECT ui.interaction_type, p.post_id, u.username, p.caption
FROM UserInteraction ui
JOIN Post p ON ui.post_id = p.post_id
JOIN [User] u ON p.user_id = u.user_id
WHERE ui.user_id = (SELECT user_id FROM [User] WHERE username = 'serenawilliams')
AND ui.interaction_type = 'like';

SELECT c.comment_id, c.text, p.post_id, u.username, p.caption
FROM Comment c
JOIN Post p ON c.post_id = p.post_id
JOIN [User] u ON p.user_id = u.user_id
WHERE c.user_id = (SELECT user_id FROM [User] WHERE username = 'serenawilliams');
```

100 %

Results Messages

	interaction_type	post_id	username	caption
1	like	1	messi	Winning another game!

	comment_id	text	post_id	username	caption
1	1	Amazing goal!	1	messi	Winning another game!

4. Find the top 5 users with the most number of followers who have no profile picture, ordered by number of followers.

SQLQuery1.sql - D...R7SGNE\DUAN (76))*



```
SELECT TOP 5 user_id, username, NumFollower
FROM [User]
WHERE profile_picture IS NULL
ORDER BY NumFollower DESC;
```

100 %


Results Messages



	user_id	username	NumFollower
1	2	messi	600000
2	1	cristiano	500000
3	3	serenawilliams	200000
4	5	aplasticplant	10000
5	11	user4	1200

5. Find all direct messages sent by user 'that_talkative_user' between 7:22 am March 12, 2022 and 5:04 pm December 4th, 2022 to users who either have 10+ followers or are following 10+ users.

SQLQuery1.sql - D...R7SGNE\DUAN (76)) *  

```
SELECT dm.message_id, u.username AS receiver, dm.message_text, dm.created_at
FROM DirectMessage dm
JOIN [User] u ON dm.receiver_id = u.user_id
WHERE dm.sender_id = (SELECT user_id FROM [User] WHERE username = 'that_talkative_user')
AND dm.created_at BETWEEN '2022-03-12 07:22:00' AND '2022-12-04 17:04:00'
AND (u.NumFollower >= 10 OR u.NumFollowing >= 10);
```

100 % 

 Results  Messages

	message_id	receiver	message_text	created_at
1	1	movie_quotes	Hey, how are you?	2022-03-12 07:30:00.000
2	2	movie_quotes	Let's catch up!	2022-05-15 10:45:00.000
3	3	movie_quotes	Are you free tomorrow?	2022-09-20 14:15:00.000
4	4	movie_quotes	Good morning!	2022-12-04 16:50:00.000

6. Find the top 5 supporters of an account. The top 5 user who like and comment the most on the posts from the account 'aplasticplant', ordered by total number of likes + comments.

```
SQLQuery1.sql - D:\R7SGNE\DUAN (76)) *  X
SELECT TOP 5 u.user_id, u.username,
COUNT(ui.interaction_id) + COUNT(c.comment_id) AS total_interactions
FROM [User] u
LEFT JOIN UserInteraction ui ON u.user_id = ui.user_id
AND ui.post_id IN (SELECT post_id FROM Post WHERE user_id = (SELECT user_id FROM [User] WHERE username = 'aplasticplant'))
LEFT JOIN Comment c ON u.user_id = c.user_id
AND c.post_id IN (SELECT post_id FROM Post WHERE user_id = (SELECT user_id FROM [User] WHERE username = 'aplasticplant'))
GROUP BY u.user_id, u.username
ORDER BY total_interactions DESC;
```

100 %

Results Messages

	user_id	username	total_interactions
1	5	aplasticplant	1
2	7	lifeoftheparty	1
3	6	movie_quotes	0
4	4	that_talkative_user	0
5	3	serenawilliams	0

7. Find the user with the most views on their Stories.

SQLQuery1.sql - D:\R7SGNE\DUAN (76))*

```
SELECT TOP 1 s.user_id, u.username, COUNT(sv.view_id) AS total_views
FROM StoryView sv
JOIN Story s ON sv.story_id = s.story_id
JOIN [User] u ON s.user_id = u.user_id
GROUP BY s.user_id, u.username
ORDER BY total_views DESC;
```

100 %

Results Messages

	user_id	username	total_views
1	2	messi	4

8. For the user with username 'movie_quotes', find the one user who likes their stories the most but talks the least with them.



```
SQLQuery1.sql - D:\R7SGNE\DUAN (76)* - X
SELECT TOP 1 ui.user_id, u.username,
    COUNT(ui.interaction_id) AS total_likes,
    COUNT(dm.message_id) AS total_messages
FROM UserInteraction ui
JOIN [User] u ON ui.user_id = u.user_id
LEFT JOIN DirectMessage dm
ON ui.user_id = dm.sender_id AND dm.receiver_id = (SELECT user_id FROM [User] WHERE username = 'movie_quotes')
WHERE ui.story_id IN (SELECT story_id FROM Story WHERE user_id = (SELECT user_id FROM [User] WHERE username = 'movie_quotes'))
AND ui.interaction_type = 'like'
GROUP BY ui.user_id, u.username
ORDER BY total_likes DESC, total_messages ASC;
```

100 %


Results Messages



	user_id	username	total_likes	total_messages
1	7	lifeoftheparty	2	0

9. Find all the stories liked by users who commented on post with the id ~~'412EL5357109'~~ '2'

SQLQuery1.sql - D:\R7SGNE\DUAN (76)) *  

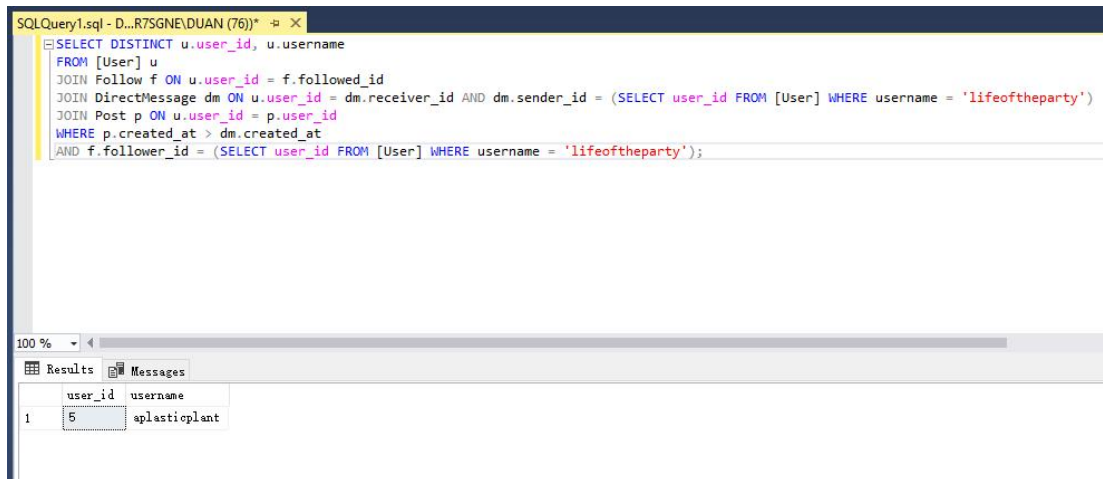
```
SELECT DISTINCT s.story_id, s.user_id, u.username, s.image_url, s.created_at
FROM UserInteraction ui
JOIN Story s ON ui.story_id = s.story_id
JOIN [User] u ON s.user_id = u.user_id
WHERE ui.user_id IN (SELECT DISTINCT user_id FROM Comment WHERE post_id = '2')
AND ui.interaction_type = 'like';
```

100 % 

 Results  Messages

	story_id	user_id	username	image_url	created_at
1	5	6	movie_quotes	movie_story.jpg	2025-02-18 13:20:15.943
2	7	6	movie_quotes	class_story.jpg	2025-02-19 12:35:25.730

10. For user 'lifeoftheparty', find all users they follow who only started posting after they received at least 1 direct message from them.



```
SQLQuery1.sql - D:\R7SGNE\DUAN (76)) *  X
SELECT DISTINCT u.user_id, u.username
FROM [User] u
JOIN Follow f ON u.user_id = f.followed_id
JOIN DirectMessage dm ON u.user_id = dm.receiver_id AND dm.sender_id = (SELECT user_id FROM [User] WHERE username = 'lifeoftheparty')
JOIN Post p ON u.user_id = p.user_id
WHERE p.created_at > dm.created_at
AND f.follower_id = (SELECT user_id FROM [User] WHERE username = 'lifeoftheparty');
```

100 %

Results Messages

	user_id	username
1	5	splasticplant