

TABLE CREATION

```
mysql> CREATE TABLE posts ( post_id INT AUTO_INCREMENT PRIMARY KEY, creator
VARCHAR(25) NOT NULL, text TEXT, num_likes INT DEFAULT 0, num_comments INT
DEFAULT 0, timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP, CONSTRAINT
chk_num_likes CHECK (num_likes >= 0), CONSTRAINT chk_num_comments CHECK
(num_comments >= 0), foreign key(creator) references users(user_id));
Query OK, 0 rows affected (0.09 sec)
```

```
mysql> create table messages(sender_name VARCHAR(255) NOT NULL, receiver_name
VARCHAR(255) NOT NULL, timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
text TEXT, CONSTRAINT fk_sender FOREIGN KEY (sender_name) REFERENCES
users(user_id), CONSTRAINT fk_receiver FOREIGN KEY (receiver_name) REFERENCES
users(user_id));
Query OK, 0 rows affected (0.11 sec)
```

```
mysql> CREATE TABLE Follower ( user_id varchar(25), follower_id varchar(25),
PRIMARY KEY (user_id, follower_id), FOREIGN KEY (user_id) REFERENCES
Users(user_id), FOREIGN KEY (follower_id) REFERENCES Users(user_id));
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> create table Account(DOJ Date,password varchar(25),user_name varchar(25)
PRIMARY KEY,Mode varchar(10));
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> CREATE TABLE Users (user_id varchar(25) PRIMARY KEY,bio TEXT,num_followers
INT DEFAULT 0, num_posts INT DEFAULT 0, num_following INT DEFAULT 0,
CONSTRAINT chk_num_followers CHECK (num_followers >= 0), CONSTRAINT
chk_num_posts CHECK (num_posts >= 0), CONSTRAINT chk_num_following CHECK
(num_following >= 0));
Query OK, 0 rows affected (0.07 sec)
```

```
mysql> CREATE TABLE comments ( comment_id INT AUTO_INCREMENT PRIMARY KEY,
user_id VARCHAR(25) NOT NULL, text TEXT, post_id INT NOT NULL, num_replies INT
DEFAULT 0, num_likes INT DEFAULT 0, CONSTRAINT fk_username FOREIGN KEY
(user_id) REFERENCES users(user_id), CONSTRAINT fk_post_id FOREIGN KEY (post_id)
REFERENCES posts(post_id), CONSTRAINT chk_num_replies CHECK (num_replies >= 0),
CONSTRAINT check_num_likes CHECK (num_likes >= 0));
Query OK, 0 rows affected (0.10 sec)
```

```
mysql> create table likes
-> (post_id int,user_id varchar(50),constraint fk_pid foreign key (post_id) references
posts(post_id), constraint fk_uid foreign key (user_id) references users(user_id));
Query OK, 0 rows affected (0.18 sec)
```

```
mysql> create table login(user_id varchar(25),password varchar(25))
```

```
-> ;
```

```
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> show tables;
```

```
+-----+
```

```
| Tables_in_project |
```

```
+-----+
```

```
| account          |
```

```
| comments         |
```

```
| follower         |
```

```
| likes            |
```

```
| messages         |
```

```
| posts            |
```

```
| reply            |
```

```
| users
```

```
| followRequests
```

```
|login |
```

```
+-----+
```

```
8 rows in set (0.00 sec)
```

TRIGGERS AND PROCEDURES

```
mysql> create trigger add_user
```

```
-> after insert on account
```

```
-> for each row
```

```
-> begin
```

```
-> insert into users values(NEW.user_name,NULL,0,0,0);
```

```
-> end//
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> create procedure makePost
```

```
-> (IN creator varchar(25),
```

```
-> IN text varchar(25))
```

```
-> begin
```

```
-> insert into posts values(creator,text);
```

```
-> end//
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> CREATE PROCEDURE insertcomment(
-> IN user_id VARCHAR(25),
-> IN text TEXT,
-> IN post_id INT)
-> BEGIN
-> INSERT INTO comments VALUES (user_id,text,post_id,0,0);
-> UPDATE posts
-> SET num_comments = num_comments + 1 WHERE posts.post_id = post_id;
-> END //
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> CREATE PROCEDURE InsertUser ( IN p_DOJ DATE, IN p_Password
VARCHAR(255), IN p_Account_id VARCHAR(50), IN p_Mode VARCHAR(50))BEGIN
INSERT INTO user_table (DOJ, Password, Account_id, Mode) VALUES (p_DOJ,
p_Password, p_Account_id, p_Mode);END //
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> CREATE PROCEDURE incrementlikes (IN p_post_id INT)
-> BEGIN
-> UPDATE posts SET num_likes = num_likes + 1 WHERE post_id = p_post_id;
-> END //
Query OK, 0 rows affected (0.02 sec)
```

```
CREATE PROCEDURE homepage(IN user_id_ varchar(25))
BEGIN
DECLARE done BOOLEAN DEFAULT FALSE;
DECLARE single_value_column_value VARCHAR(25); -- Adjust data type as needed
DECLARE cur CURSOR FOR
SELECT user_id
FROM follower
WHERE follower.follower_id=user_id_;
DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;
OPEN cur;
read_loop: LOOP
FETCH cur INTO single_value_column_value;
IF done THEN
LEAVE read_loop;
END IF;

select creator,text,num_likes,num_comments,timestamp from posts where
creator=single_value_column_value order by timestamp;
END LOOP;
CLOSE cur;
```

END //

mysql> create procedure logout()

-> begin

-> delete from login;

-> end//

Query OK, 0 rows affected (0.01 sec)

mysql> create procedure viewcomments(IN post_id int)

-> begin

-> select user_id,text,num_likes,num_replies from comments where
comments.post_id=post_id;

-> end//

Query OK, 0 rows affected (0.01 sec)

mysql> create procedure sendmessage(IN sender_name varchar(25),IN receiver_name
varchar(25),IN text TEXT)

-> begin

-> insert into messages values(sender_name,receiver_name,CUR_TIME(),text);

-> end//

Query OK, 0 rows affected (0.01 sec)

mysql> create procedure viewmessages(IN user_id varchar(25))

-> begin

-> select sender_name,text,timestamp from messages where receiver_name=user_id order
by timestamp desc;

-> end//

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

CREATE PROCEDURE GetFollowers (

IN p_user_id VARCHAR(25)

)

BEGIN

SELECT follower_id

FROM Follower

WHERE user_id = p_user_id;

END //

CREATE PROCEDURE GetFollowingList (

IN p_user_id VARCHAR(25)

)

BEGIN

```
SELECT user_id
FROM Follower
WHERE follower_id = p_user_id;
END //
```

```
CREATE PROCEDURE ViewUserProfile (
  IN p_user_id VARCHAR(25)
)
BEGIN
  SELECT user_id, bio, num_followers, num_posts, num_following
  FROM Users
  WHERE user_id = p_user_id;
  select creator,text,num_likes,num_comments,timestamp from posts where
creator=p_user_id;
END //
```

```
mysql> create procedure searchUser(IN user_id varchar(25))
-> begin
-> declare username varchar(25);
-> select user_id from users where users.user_id=user_id into username;
-> if username IS NOT NULL then
-> call ViewUserProfile(username);
-> else
-> select "User not found";
-> end if;
-> end//
```

Query OK, 0 rows affected (0.01 sec)

```
CREATE PROCEDURE follow(IN user_id_param VARCHAR(255))
BEGIN
  DECLARE curruser VARCHAR(255);
  -- Select the current user_id from the login table
  SELECT user_id INTO curruser FROM login LIMIT 1;

  -- Insert into the follower table
  INSERT INTO follower VALUES (user_id_param,curruser);

  -- Update the users table to increment num_followers and num_following
  UPDATE users
  SET num_followers = num_followers + 1
  WHERE users.user_id = user_id_param;

  UPDATE users
  SET num_following = num_following + 1
```

```
WHERE users.user_id = curruser;  
END //
```

Query OK, 0 rows affected (0.02 sec)

Query for explore page:

```
select post_id, text, num_likes, num_comments, timestamp from posts where creator in (select  
creator from posts where post_id in (select post_id from likes where user_id = active_user))
```

Procedure displaysinglemessage:

```
begin
```

```
select messages.sender_name,text from messages where sender_name=sender_id and  
receiver_name=receiver_id;
```

```
end
```