**Coding Steps:**

You have been asked to create a database for a new social media application that your company is developing.

The database must store user data such as username, email, password, etc...

Users are able to post and comment. So, your database must also store post and comment data.

We need to know which user made which posts.

We also need to know which user made which comments, and which post a comment is on.

Posts and comments should both include the time they were created, and what the content of the post or comment is.

Create an Entity Relationship Diagram (ERD) using draw.io to model the database you will create. Insert a screenshot of the ERD in the screenshots section below.

Write a SQL script to create the database. Insert a screenshot of the SQL in your script.

Hints:

You will only need three tables.

Two tables will have foreign key references.

One table will have two foreign key references.

**SQL SCRIPT**

mysql> CREATE DATABASE socialmedia\_db;

Query OK, 1 row affected (0.06 sec)

mysql> USE socialmedia\_db;

Database changed

mysql> CREATE TABLE user(

-> user\_id INT NOT NULL AUTO\_INCREMENT,

-> username VARCHAR(15),

-> password VARCHAR(50),

-> email VARCHAR(50),

-> PRIMARY KEY (user\_id)

-> );

mysql> CREATE TABLE post(

-> post\_id INT NOT NULL AUTO\_INCREMENT,

-> user\_id INT NOT NULL,

-> post VARCHAR(10000),

-> timestamp\_post INT,

-> PRIMARY KEY (post\_id),

-> FOREIGN KEY (user\_id) REFERENCES user(user\_id)

-> );

mysql> CREATE TABLE comment(

-> comment\_id INT NOT NULL AUTO\_INCREMENT,

-> user\_id INT NOT NULL,

-> post\_id INT NOT NULL,

-> comment VARCHAR(10000),

-> timestamp\_comment INT,

-> PRIMARY KEY (comment\_id),

-> FOREIGN KEY (user\_id) REFERENCES user(user\_id),

-> FOREIGN KEY (post\_id) REFERENCES post(post\_id)

-> );

Query OK, 0 rows affected (0.10 sec)

mysql> show tables;

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| Tables\_in\_socialmedia\_db |

+--------------------------+

| comment |

| post |

| user |

+--------------------------+

3 rows in set (0.01 sec)

mysql> desc comment;

+-------------------+----------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+-------------------+----------------+------+-----+---------+----------------+

| comment\_id | int | NO | PRI | NULL | auto\_increment |

| user\_id | int | NO | MUL | NULL | |

| post\_id | int | NO | MUL | NULL | |

| comment | varchar(10000) | YES | | NULL | |

| timestamp\_comment | int | YES | | NULL | |

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5 rows in set (0.04 sec)

mysql> desc post;

+----------------+----------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+----------------+----------------+------+-----+---------+----------------+

| post\_id | int | NO | PRI | NULL | auto\_increment |

| user\_id | int | NO | MUL | NULL | |

| post | varchar(10000) | YES | | NULL | |

| timestamp\_post | int | YES | | NULL | |

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4 rows in set (0.01 sec)

mysql> desc user;

+----------+-------------+------+-----+---------+----------------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+----------------+

| user\_id | int | NO | PRI | NULL | auto\_increment |

| username | varchar(15) | YES | | NULL | |

| password | varchar(50) | YES | | NULL | |

| email | varchar(50) | YES | | NULL | |

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4 rows in set (0.01 sec)