**Report on Database Creation and Management for App (Instagram-like)**

**Objective**

To create a database named **App** that will to serve as the foundation for an application similar to Instagram.

To modify user data in the **Users** table by updating a password and deleting an entry from the **Posts** table after successfully creating the database and its associated tables.

**Database and Table Setup**

Before performing any modifications, we first created the database and tables.

**Database**: The **App** database was created to manage user and post information *as seen in line 2 in the worksheet,*

A brief overview of the tables that were created in *in line 6 and in line 27 in the worksheet respectively,* includes:

**Users table** is designed to store personal data of the app users. The structure of the table includes:

* **User\_ID**: A unique identifier for each user.
* **username**: The username for the user.
* **gender**: The user's gender.
* **email**: The user's email (unique constraint to prevent duplicates).
* **Password**: The user's password.

**The Posts** table was created to record posts made by users on the platform. It includes:

* **Post\_ID**: A unique identifier for each post.
* **User\_ID**: A foreign key linking posts to users (establishes a relationship with the Users table).
* **likes**: The number of likes a post has received.
* **post\_month**: The month the post was created.

After setting up the database, we proceeded with modifying the data.

### ****Email Update for a User****

**Aim**: To update the email of a user with **User\_ID = 3** (username: **"dannette\_zot"**) in the **Users** table.

**Task**: The following query was executed to change the email of the user from "dzot@hotmail.com" to [dot@gmail.com](mailto:dot@gmail.com) *as seen in line 87 in the worksheet*:

**Result:** The email for user **"dannette\_zot"** was successfully updated.

To verify the update, the following query was used *as seen in line 93 in the worksheet*:

### ****Deleting a Post Entry****

**Aim**: To delete a post with **Post\_ID = 2** from the **Posts** table.

**Task**: To remove the post, the following DELETE statement was executed *in line 97 in the worksheet*:

**Result:** The post with **Post\_ID = 2**, which originally belonged to user **"jade\_odonkor"** with 75 likes in February, was successfully deleted.

The deletion was confirmed by running the following query *as seen in line 100 n the worksheet*

### ****Conclusion****

The database created for the app contains two key tables: **Users** and **Posts**, which handle user information and social interactions, respectively. Proper relationships were established between the tables, and essential operations such as data insertion, updates, and deletions were successfully implemented. This system could serve as the basis for managing users and their content in a real-world application similar to Instagram.