



**NATIONAL UNIVERSITY**  
OF COMPUTER & EMERGING SCIENCES  
PESHAWAR CAMPUS



<b>Assignment Points:</b>	Views and User Roles	<b>Semester:</b>	Spring 2021
<b>Date Set:</b>	27 <sup>th</sup> April, 2021	<b>Due Date:</b>	3 <sup>rd</sup> May, 2021
<b>Course:</b>	Database Systems	<b>Instructor:</b>	Ms. Safia Fatima

This assignment shall test your concepts of views and user roles that you have studied in database systems course. A schema has already been made for this assignment and so you need to first download it from this link:

[https://www.dropbox.com/s/p5nvuyavnjg7pvt/mysql\\_bank.sql?dl=0](https://www.dropbox.com/s/p5nvuyavnjg7pvt/mysql_bank.sql?dl=0)

After downloading it in your desired folder, you need to source it in mysql prompt using the command:

```
mysql> SOURCE /<path to installed schema>/mysql_bank.sql
```

After issuing this command you will have a database created named 'mysql\_bank', with all the required tables and data inserted in those particular tables.

## 1. Views

*Firstly, your task is to make views of instances mentioned below:*

- 1 . Let's say this bank has some authorization requirements which restricts employees of bank from seeing records or information about officers who are also customers. So create a view, named 'customer\_info' which lets the employees see all customers and their information except those customers who are officers.
- 2 . Create a view named 'individual\_info' which shows all information of individuals *except* their customer Ids and also lists how much balance each individual has in his/her account.
- 3 . Create a view named 'customer\_accounts' which shows information of only those accounts which have PRODUCT\_TYPE\_CD as 'Account' and which have pending balance less than '2000'.

4 . Create a view named 'senior\_views' which presents all information about employees with start dates in 2002 or after it. This view shall also include information about the branches that these employees are stationed to.

## 2. User Roles

Sometimes, due to level of clearance or restrictions, a bank needs to grant some privileges to certain people or to take privileges from others to establish security. A MySQL role is a named collection of privileges. Like user accounts, roles can have privileges granted to and revoked from them.

A user account can be granted roles, which grants to the account the privileges associated with each role. So you need to implement this concept in working by completing the two tasks below:

1 . You need to now create a user which has the name set as your roll number and assign any password of your liking. Let's say a user is created with name 'P180058' and password 'fast123'.

**Note:** You MUST use your own roll number as user name.

Now, grant this user that you have created, the permissions to run SELECT, INSERT, UPDATE AND DELETE commands against all tables.

You need to then issue 3 commands each for INSERT, UPDATE, and DELETE, for the tables of any 5 tables.

2 . Let us assume that an officer is allowed to insert and update but NOT to delete information about products. So create a *new* user with any name and password of your liking which can only INSERT and UPDATE on the PRODUCT table.

Issue 3 commands of INSERT and 3 commands of UPDATE by this user on the Product table.

## 3. Submission

For each step of this assignment, you need to capture screenshots of everything you do. In the end paste all those screenshots in a word file and submit the assignment in PDF format.