***Assignment 1:*** *Create a new database user with specific privileges using the CREATE USER and GRANT commands. Then, write a script to REVOKE certain privileges and DROP the user.*

***how to create a new database user with specific privileges, revoke privileges, and drop the user:***

***Create User:***

*-- Create a new user*

*CREATE USER 'libraryuser'@'%' IDENTIFIED BY 'password123';*

*-- Grant privileges to the user*

*GRANT SELECT, INSERT, UPDATE, DELETE ON LibrarySystem.\* TO 'libraryuser'@'%';*

*GRANT EXECUTE ON PROCEDURE LibrarySystem.\* TO 'libraryuser'@'%';*

***Grant Specific Privileges:***

*-- Grant privileges on specific tables*

*GRANT SELECT, INSERT, UPDATE ON LibrarySystem.Books TO 'libraryuser'@'%';*

*GRANT SELECT, INSERT, UPDATE ON LibrarySystem.Loans TO 'libraryuser'@'%';*

*-- Grant privileges on specific procedures*

*GRANT EXECUTE ON PROCEDURE LibrarySystem.GetBookDetails TO 'libraryuser'@'%';*

***Revoke Privileges:***

*-- Revoke delete privilege on Books table*

*REVOKE DELETE ON LibrarySystem.Books FROM 'libraryuser'@'%';*

*-- Revoke execute privilege on GetBookDetails procedure*

*REVOKE EXECUTE ON PROCEDURE LibrarySystem.GetBookDetails FROM 'libraryuser'@'%';*

***Drop User:***

*-- Revoke all privileges from the user*

*REVOKE ALL PRIVILEGES, GRANT OPTION FROM 'libraryuser'@'%';*

*-- Drop the user*

*DROP USER 'libraryuser'@'%';*

***Script****:*

*#!/bin/bash*

*# MySQL connection details*

*USERNAME="root"*

*PASSWORD="rootpassword"*

*HOST="localhost"*

*DATABASE="LibrarySystem"*

*# Create user*

*mysql -u$USERNAME -p$PASSWORD -h$HOST $DATABASE <<EOF*

*CREATE USER 'libraryuser'@'%' IDENTIFIED BY 'password123';*

*GRANT SELECT, INSERT, UPDATE, DELETE ON LibrarySystem.\* TO 'libraryuser'@'%';*

*GRANT EXECUTE ON PROCEDURE LibrarySystem.\* TO 'libraryuser'@'%';*

*EOF*

*# Revoke privileges*

*mysql -u$USERNAME -p$PASSWORD -h$HOST $DATABASE <<EOF*

*REVOKE DELETE ON LibrarySystem.Books FROM 'libraryuser'@'%';*

*REVOKE EXECUTE ON PROCEDURE LibrarySystem.GetBookDetails FROM 'libraryuser'@'%';*

*EOF*

*# Drop user*

*mysql -u$USERNAME -p$PASSWORD -h$HOST $DATABASE <<EOF*

*REVOKE ALL PRIVILEGES, GRANT OPTION FROM 'libraryuser'@'%';*

*DROP USER 'libraryuser'@'%';*

*EOF*