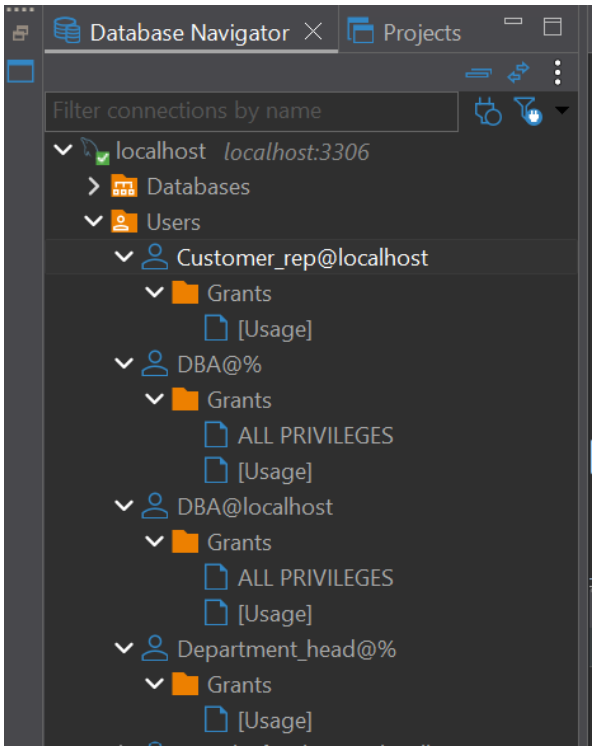
# INT 2080 Lab 5 (100 marks)

## Question 1: Create user accounts (40 marks)

a. Using the table below, create user accounts using the following provided:

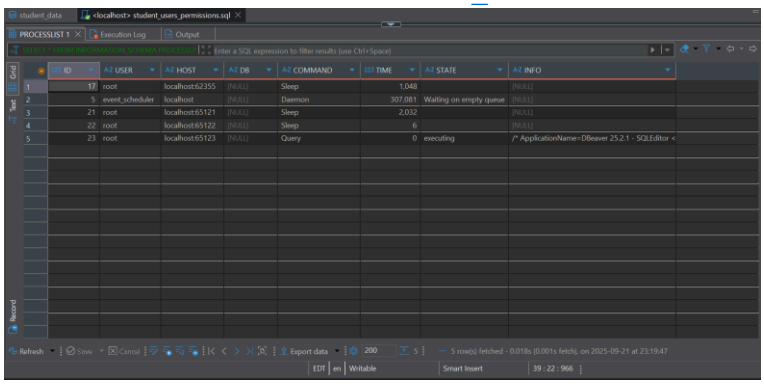
| Username | Hostname | Privileges |
|---|---|---|
| Customer_rep | localhost | Read only on all objects in the "student" database |
| Department_head | % | Read, write on all objects in the "student" database |
| DBA | % | All privileges objects in the "student" database |
| DBA | localhost | All privileges objects in the "student" database with option to grant to other users |

b. Using your MySQL Workbench GUI, display the users and other users on the MySQL server.



**Question 2: Connections and sessions (60 marks)**

a. Run a command to display all the running processes on your MySQL server.
SELECT * FROM INFORMATION_SCHEMA.PROCESSLIST;




b. An employee has just been terminated. Explain and demonstrate how you will disable the user account of that employee from the MySQL Server.
After an employee has been terminated, the best way to restrict their access is to lock the employee out of the MySQL Server. To lock the employer out of the MySQL Server:
1.) I will first check employee permissions - SHOW GRANTS FOR 'john_smith'@'localhost';
2.) lock the account - ALTER USER 'Customer_rep'@'%' ACCOUNT LOCK;
3.) validate the account has been locked
4.) then finally kill all active sessions - SELECT * FROM INFORMATION_SCHEMA.PROCESSLIST;

c. A query has been running for many hours. Demonstrate and explain how you will terminate the connection from commandline.
Ater a query has been running for hours, the best way to terminate the active connection from command line is to log onto the MySQL server, then run this command: SELECT * FROM INFORMATION_SCHEMA.PROCESSLIST; after running the command, use kill -9 process_id to terminate active connection.

d. Demonstrate and explain two (2) methods you can safely shut down MySQL server from the commandline.
1.) To safely shut down MySQL, run the command mysqladmin -u root -p shutdown from the command line, then enter your password when prompted. This method uses MySQL's built-in administrative tool to perform a graceful shutdown that waits for active transactions to complete, properly closes all connections, and flushes all data to disk before stopping the server.
2.) Another way is to execute the SHUTDOWN; SQL statement from within the MySQL prompt. This method also performs a graceful shutdown by ensuring data integrity,

properly closing client connections, and allowing running queries to finish before the server stops.

NOTE:

- Insert all screenshots in a MS Word or similar document and convert to pdf
- All screenshots must be full screen showing dates on the taskbar
- Attach all logs to your submission
- Answer all questions