ICS 424 – Advanced Database Systems
Assignment 2 - Project 1 (8%) – Database Administration
Due Date – March 23, 2024

Demonstrate the following using the horse database on the DBMS PostgreSQL (Postgres):

- Demonstrate startup and shutdown options and procedures.

- Demonstrate both the logical and physical structures of a database.

- Create a materialized view with a complex join.

- Develop and demonstrate one stored procedure and one trigger.

- Demonstrate locking and timestamping.

- Diagnose and resolve locking conflicts.

- Evaluate the various backup options available.

- Recover a database.

- Create and manage indexes.

- Collect and analyze relevant database performance information. Display important results of your analysis.

Submit a detailed project report listing all the abobe functions with their results.

Note:

1. Each student will work individually in this project.
2. Download the DBMS version 16.2 from the Postgres site: https://www.postgresql.org/
3. Teams demo will be scheduled in the week of March 23, 2024.
4. You may be asked to run SQL queries on the base tables and the view.