DBMS Assignment 3

Database Connectivity

Objective: The goal of this assignment is to connect to databases from an external program. We will do so using the Java, C, and python programs. The database may be either postgresql or mysql. You may use the driver APIs JDBC (Java), ODBC (C), and psyscop/mysql connector (python) for connectivity.

Problem Statement: In Assignment 2 on SQL, you have created a number of tables and populated them using sample data. You have also written twelve SQL queries. In this assignment you have a to write a menu driven Java/C/python program, where the user will give a choice of query number and the program should print a formatted output of the query results on the screen. Also write a 13th query which is same as query number 1 in Assignment 2 but the name of the "procedure" should be input by the user.

Submissions: You have to submit the java and C and python program (properly commented) which connects to either/both postgresql/mysql databases.

We will also ask you to demo the programs in your screen during next weeks lab hours.

The syntax used by these API may be referred from:

1. JDBC:

https://docs.oracle.com/javase/tutorial/jdbc/basics/index.html

2. ODBC:

https://learn.microsoft.com/en-us/sql/odbc/reference/introduction-to-odbc?view=sql-server-ver16

3. Python:

https://www.postgresqltutorial.com/postgresql-python/connect/

https://dev.mysql.com/doc/connector-python/en/