University of Toronto
CSC343, Winter 2015

JDBC Exercise

Today you will connect a Java program to your postgreSQL database and run some queries from Java.

1. Log on to `dbsrv1.cdf.utoronto.ca`
2. Create a directory where you'd like to do this work and `cd` to it.
3. Get a copy of a file, which defines a small dataset (`jelly-beans.sql`) and some java code (`Example.java`) that you will use today:

   ```
   cp ~csc343h/fall/public_html/in_class/w6/code/* .
   ```

   (You really do need that period at the end.)
4. Start postgreSQL:

   ```
   psql csc343h-<your username>
   ```

5. Import jelly-beans.sql into your database:

   ```
   \i jelly-beans.sql
   ```

6. Use `\d` to see what is defined and a `SELECT` query to examine the contents of table `guesses`. Then use `\q` to exit psql.
7. Get your bearings in the code. Find the parts where it:
   (a) Establishes a connection to the database.
   (b) Runs a query to find all the guesses by kids under 10, and iterates through the results to print them.
   (c) Builds a query to find all the guesses by a particular person, but with a *placeholder* for the person's name. The program then substitutes in a name entered by the user and goes on to run the query and print the results.
8. Edit `Example.java` to replace `bogdan` with your cdf userid on these two lines:

   ```
   url = "jdbc:postgresql://localhost:5432/csc343h-bogdan";
   conn = DriverManager.getConnection(url, "bogdan", "");
   ```

9. Compile the Java code:

   ```
   javac Example.java
   ```

10. Run the compiled code:

    ```
    java -cp /local/packages/jdbc-postgresql/postgresql-8.4-701.jdbc4.jar: Example
    ```

    The path to the `jar` file is hard to type. Tip: Use filename completion!