CS 440
Last Homework!
Spring 2015
Due Wednesday, April 29

This homework will be done *entirely* from Java using the JDBC. You can connect to your database as we discussed in class.

1. Create a Java class **Baseball,** consisting of fields {name (String), city (String), year(int), position(String) and league(String). You may inherit from an appropriate superclass, or implement any interfaces that you deem appropriate. You may also make any constructors or methods that you deem helpful.

2. Create a second Java class, with the following methods. This class will interact with your Oracle database, so create whatever helper methods you require in order to connect with the database.

a) method_1: this method should create, on the database, an Oracle OBJECT ***baseball_obj*** with an analogous set of fields as your java class, *Baseball*.
b) method_2: this method should create, on the database, an Oracle OBJECT TABLE ***baseball_tab***, that will be populated with objects of type *baseball_obj*. An appropriate primary key as well as any other constraints you deem appropriate should be included.
c) method_3: this method should populate the database with all data from a table ***MLB*** on my database *ramorehead.*
d) method_4. This method should provide a method to send a league and a year as strings to the Oracle database and to return from the database a Baseball (Q1) object from table *baseball_tab* consistent with the input. IN ORDER TO OBTAIN CREDIT THE OBJECT MUST BE RETURNED AS A *BASEBALL* OBJECT using Oracle REF's as demonstrated in class.
e) method_5. Demonstrate method_4 with input “NL” and year “1952”. Print out the contents of your Baseball object using an appropriate implementation of toString.
f) method_6. Create a method that takes a single integer as a parameter (for example, ***n***) and which queries the database and retrieves the ***n*** cities from the database with the highest number of MVP's – in order, highest first.
g) method_7. Demonstrate method_6 by accessing and printing out the top 10 cities in the database.

Demonstrate your program by running all methods in order and submit the output along with both Java classes.