California State University, San Bernardino School of Computer Science & Engineering
CSE572 W2019 -Database Systems
LAB 02 – ORACLE Data Dictionary

1. Log on to orafarm and go to your CSE572 directory.
2. Copy ~/CSE572W19/catalog.sql into your CSE572 directory
   `cp ~/CSE572W19/catalog.sql .`

ORACLE has an integrated data dictionary and is named 'dict' or 'dictionary'. **The data dictionary** is a **read-only** set of tables that provides information about the database. A data dictionary contains:

- The definitions of all schema objects in the database (tables, views, indexes, clusters, synonyms, sequences, procedures, functions, packages, triggers, and so on)
- How much space has been allocated for, and is currently used by, the schema objects
- Default values for columns
- Integrity constraint information
- The names of Oracle Database users
- Privileges and roles each user has been granted
- Auditing information, such as who has accessed or updated various schema objects
- Other general database information

The data dictionary is structured in tables and views, just like other database data. All the data dictionary tables and views for a given database are stored in that database's SYSTEM tablespace.

Not only is the data dictionary central to every Oracle database, it is an important tool for all users, from end users to application designers and database administrators.

Use SQL statements to access the data dictionary. Because the data dictionary is read only, you can issue only queries (SELECT statements) against its tables and views.

Dict is a table that has two attributes: table_name and comments.

To get the attributes (or structure) of dict.... **SQL> desc dict**

There are three main groups of tables found in the data dictionary:

tables with prefix USER_	User's view (what is in the user's schema)
tables with prefix ALL_	Expanded user's view (what the user can access)
tables with prefix DBA_	Database administrator's view (what is in all users' schemas)

To get the contents of dict ….

Maximize terminal screen size

SQL> set pagesize 60	make the length of terminal screen 60 lines long
SQL> start format_dict	calls a file that will display contents of dict in readable 2-column format
SQL> select *	
2> from dict;	display the contents of dict using the format specified in format_dict.sql

START of LAB 02 Exercises.

There is nothing to submit. I will be checking the 19 spooled files.
The exercises below must be finished by Tuesday, January 22.

1. **Be sure you are in your CSE572 directory.**
2. **Print the file catalog.sql.**
3. **Login to oracle.**
4. **For each tablename in catalog.sql do the following**
    a. **spool LAB02_tablename** **this opens a text file called tablename and gives it an extension of .lst**
    b. **desc tablename** **this will display the structure of tablename**
    c. **spool off**

   Step 4 will produce 19 spooled files starting with LAB02_ and extension of .lst
5. **Print each of these 19 spooled files (this must be done outside of sqlplus but in orafarm).**