California State University, San Bernardino School of Computer Science

& Engineering CSE572 W2019 -Database Systems

LAB 03 – HR Sample Schema

Log on to orafarm.cse.csusb.edu and go to your CSE572 directory.

In this lab, you work with Oracle tables using basic SQL. The exercise focuses on HR, the sample human resources database you activated above. Before starting the exercise, explore the HR database schema, using these helpful hints as needed.

- Study the HR database schema linked here: Database Sample Schemas (look under "Schema Diagrams").
- List all of HR user's tables by logging in as the hr user and running SELECT table_name FROM dba_tables WHERE owner = 'HR' and SELECT view_name FROM dba_views WHERE owner= 'HR' ; .
- Based on results of previous queries, list tables and views included in HR schema are
    - JOBS
    - EMPLOYEES
    - JOB_BRADES
    - COUNTRIES
    - LOCATIONS
    - DEPARTMENTS
    - JOB_HOSTORY
    - REGIONS
    - EMP_DETAILS_VIEW
- Display a detailed table schema using DESCRIBE tablename;

Create a file to record SQL queries, results and explanations on following questions. Upon the completion of lab works, convert the file to LAB03.PDF and submit to blackboard.

1 List all the rows of the departments table.
2 Find the number of employees in the database (hint: use the COUNT() aggregate function for this);
    a. List the employees who:
    b. have a salary greater than 15000,
    c. were hired between January 1, 2002 and January 1, 2005,
3 have a phone number that doesn't start with 515
4 List the names of the employees who are in the finance department. Try to format the names as "firstname lastname" using concatenation (i.e., ||) and order them alphabetically.
5 List the city, state and country name for all locations in the Asian region.
6 List the locations that have no state or province specified in the database.
7 Oracle provides a default table named dual, which you can use to verify that Oracle is up and running. Try to figure out the schema and the data values stored in dual. Give examples of why one might want to user such a table.