

California State University, San Bernardino  
School of Computer Science & Engineering  
CSE572 W2019 – Database Systems  
LAB 07 – Displaying Data from Multiple Tables

All exercises in this lab will be using HR database tables. For this lab exercise, you will be using

HR.EMPLOYEES, HR.DEPARTMENTS, HR.JOB\_GRADES and HR.LOCATIONS tables.

Before doing the exercises below make sure that you are in CSE572 subdirectory so that all text files that you save will be stored in this subdirectory. Also be familiar with EMPLOYEES, DEPARTMENTS, LOCATIONS, JOB\_GRADES by doing a DESCRIBE on each table and SELECT \*.

1. Create a query to display the last name, department number and department name for all employees. Save your SQL statement in a text file named LAB07\_1.sql. Run your query.
2. Create a unique listing of all jobs that in department 80. Include the location of the department in the output. Save your SQL statement in a text file named LAB07\_2.sql. Run this revised query.
3. Create a query to display the employee's last name, department name, location ID and city of all employees who earn a commission. Save your SQL statement in a text file named LAB07\_3.sql. Run your query.
4. For each employee who has an 'a' (lowercase) in his/her last name, display the employee's last name and department name. Save your SQL statement in a text file named LAB07\_4.sql. Run your query.
5. Write a query that displays the last name, job, department number and department name for all employees who work in Toronto. Save your SQL statement in a text file named LAB07\_5.sql. Run your query.
6. Create a query to display the employee's last name and employee number along with his/her manager's last name and manager number. Label the columns Employee, Emp#, Manager and Mgr#, respectively. Save your SQL statement in a text file named LAB07\_6.sql. Run your query.
7. Modify LAB06\_6.sql to display all employees including King, who has no manager. Order the results by the employee number. Save your SQL statement in a text file named LAB07\_7.sql. Run your query.

8. Show the structure of the JOB\_GRADES table. Create a query that displays the name, job, department name, salary and grade for all employees. Save your SQL statement in a text file named LAB07\_8.sql. Run your query.
9. Create a query to display the name and hire date of any employee hired after Davies. Save your SQL statement in a text file named LAB07\_9.sql. Run your query.
10. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively. Save your SQL statement in a text file named LAB07\_10.sql. Run your query.
11. Create a view called EMPLOYEES\_VU based on the employee numbers, employee names, and department numbers from the HR.EMPLOYEES table. Change the heading for the employee name to EMPLOYEE. SAVE this view in LAB07\_11.sql. Precede the CREATE VIEW command with the following comment lines

```
/* LAB07_11
Yourlastname, yourfirstname
*/
```

12. Spool LAB07\_12.lst
  - a. Issue

```
REM LAB07_12
REM yourlastname, yourfirstname
```
  - b. Run LAB07\_11.sql by doing a start
  - c. Display the contents of the EMPLOYEES\_VU view
  - d. Select the view name and text from the USER\_VIEWS data dictionary view.
  - e. Using your EMPLOYEES\_VU view, enter a query to display all employee names and department numbers.
  - f. Spool off
13. Create a view named DEPT50 that contains the employee numbers, employee last names, and department numbers for all employees in department 50. Label the view columns EMPNO, EMPLOYEE and DEPTNO. Do not allow an employee to be re-assigned to another department through the view. Save this view in LAB09\_3.sql Precede the CREATE VIEW command with the following comment lines

```
/* LAB07_13
Yourlastname, yourfirstname
*/
```

14. Spool LAB07\_14.lst

- a. Issue  
REM LAB07\_12  
REM yourlastname, yourfirstname
  - b. Run LAB07\_13.sql
  - c. Display the structure and contents of DEPT50 view.
  - d. Select the view name and text from the USER\_VIEWS data dictionary view.
  - e. Attempt to re-assign Matos to department 80 by doing an update command.
  - f. Spool off
15. Submit the a PDF file contains all your .sql statements of this lab by March 5 (Thursday) by 6:30 PM.