California State University, San Bernardino
School of Computer Science & Engineering
CSE572 W2019 – Database Systems
LAB 08 – Aggregating Data Using Group Functions
DUE: Tuesday, March 12 6:30 PM

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

1. Create a query to display the highest, lowest, sum and average salary of all employees. Label the columns Maximum, Minimum, Sum and Average, respectively. Save your SQL statement in a text file named LAB08_1.sql. Run your query.
2. Modify the query in LAB08_1.sql to display the minimum, maximum, sum, and average salary for each job type. Save your SQL statement in a text file named LAB08_2.sql. Run this revised query.
3. Create a query to display the number of employees with the same job. Save your SQL statement in a text file named LAB08_3.sql. Run your query.
4. Determine the number of managers without listing them. Label the column Number of Managers. HINT: Use the MANAGER_ID column to determine the number of managers. Save your SQL statement in a text file named LAB08_4.sql. Run your query.
5. Write a query that displays the difference between the highest and lowest salaries. Label the column DIFFERENCE. Save your SQL statement in a text file named LAB08_5.sql. Run your query.
6. Display the manager number and the salary of the lowest paid employee for that manager. Exclude anyone whose manager is not known. Exclude any groups where the minimum salary is $6,000 or less. Sort the output in descending order of salary. Save your SQL statement in a text file named LAB08_6.sql. Run your query.
7. Write a query to display each department's name, location, number of employees, and the average salary for all employees in that department. Label the columns Department , Location, Number of Workers, and Average Salary, respectively. Round the average salary to two decimal places. Save your SQL statement in a text file named LAB08_7.sql. Run your query.

Please combine all .sql and result of screen shoots to LAB08.pdf and submit it to Blackboard.