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**ComS 363 Fall 2022  
Class Participation for Week 1**

**Date: August 26, 2022**

**Learning objective:**

- Practice SQL queries involving one relation.

**Pre-requisite**

- MySQL server and MySQL workbench are ready to use. The manual for installation and setup is under the Panopto recordings folder "All things MySQL".
- Download onetabledesign.sql, emp\_work\_dept.csv, and Template-CP-WK1.sql from Canvas.

**Instruction:**

Attempt all questions including all sub-questions to get a score of 1 for this extra credit. Otherwise, a score of zero is given. Grading does not depend whether you do all of them correctly or not. But make sure you learn the correct answers later to prepare for the homework assignments and the exams.

Create a database by executing onetabledesign.sql in MySQL Workbench. Import the data from emp\_work\_dept.csv file into this database.

Write your solutions into Template-CP-WK1.sql including your name.

Do not hard code your query with values that your users do not specify. Do not include attributes not required by the users. The query results shown here are obtained from the current relation instance.

**Questions:**

1. Write an SQL query to answer each of the following questions. Your query must return correct results for every instance of the relations.
  - a) Show the number of employees in the emp\_work\_dept relation where the returned column name is numEmployees.

**Query Result:**

numEmployees
20

- b) List department id, department name of each department that has a manager. Do not list the same department id more than one time.

**Query Result:** Note that in MySQL, it will show null as the last row as well. The order of the rows does not matter for this query.

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did	dname
2	Production
3	Administration
6	Maintenance
5	Accounting

- c) List names and salaries of employees who earn more than two million dollars in ascending order of their salary. Do not list the same employee more than one time. Note that names are not unique.

**Query Result:**

ename	salary
John	2500000
Adam	2500000
Chris	2750000
John	3000000
Mark	3500000
Jacob	3500000
Paul	4000000
Dwayne	5000000

- d) Print all the department information (did, dname, budget, managerid) about two departments, Accounting and Production. Do not list the same department more than one time.

**Query Result:** The order of the rows does not matter for this query.

did	dname	budget	managerid
2	Production	2000000	105
5	Accounting	750000	118

- e) Print the name and salary of each employee who works in the Accounting department. Do not list the same employee more than one time.

**Query Result:** The order of the rows does not matter for this query.

ename	salary
John	3000000
John	2500000
Dean	1200000
Beth	400000
Kelly	300000

- f) Print the id of each employee who works in both the Production department and the Maintenance department. Do not list the same employee id more than one time.

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**Query Result:** The order of the rows does not matter.

eid
103
105
107
108