Quiz 5: SQL

Take by: ____________________________________________

Name   Student ID

• We will discuss the answers right after the quiz.
• You are to self-grade and record your actual initial score (above) as we do so.
• You should also record the correct answers for any problems that you miss.
• A full 10 points for taking this quiz will be included as part of your quiz grade.

Consider the following company dataset, where Emp.mgrno is a foreign key for Emp(eno) used to model the management chain in the company, Work.empno is a foreign key for Emp.eno, and Work.deptno is a foreign key for Dept.dno. Assume that salaries and budgets are given in dollars (per year) and ages are given in years. Write each of the queries that follow in SQL.

\[
\text{Emp}(eno, \text{name}, \text{salary}, \text{age}, \text{mgrno}) \quad \text{-- the usual info about employees}
\]
\[
\text{Work}(\text{empno}, \text{deptno}, \text{pcttime}) \quad \text{-- emps can split their time between depts}
\]
\[
\text{Dept}(\text{dno}, \text{name}, \text{budget}) \quad \text{-- the usual info about departments}
\]

1. (2 points) Print the employee numbers and names of employees who earn more per year than their manager does:

2. (3 points) Print the names of employees who spend at least some part of their time working in all of the departments that have a budget over $1M.
Emp\((\text{eno, ename, salary, age, mgrno})\) -- the usual info about employees

Work\((\text{empno, deptno, pcttime})\) -- emps can split their time between depts

Dept\((\text{dno, dname, budget})\) -- the usual info about departments

3. \((2 \text{ points})\) Print a list of the employee numbers, employee names, percent times, department numbers, and department names of all employees. There may be some employees who aren’t assigned to any department at the moment; be sure to include them on the list as well.

4. \((3 \text{ points})\) Create an employment percentage view that, for each different percent-time value \((\text{pcttime})\), lists the percent-time together with the average age and the low and high salaries for employees who work for some department for that percentage of their time.