

Homework 4

SQL using the EmployeeDB database

Write a single SQL query to return the information described for each of the 10 questions below. Submit a single SQL file (filename.sql) that contains all the queries and a brief comment with each query (like in the solutions1.sql file you were given).

You may work **ONLY** with your **Homework Team** on this assignment (not your Project Team!), and each student must submit to Moodle individually. However, every member of one Homework Team may submit the same solutions file.

Along with the solutions file, each student must submit a screenshot from their computer showing:

- Workbench (or another SQL client) with at least one query from this homework and its results visible.
- The date and time
- The About information for the computer
- The student logged in to Moodle

Sample screenshots for Windows and for Linux are shown at the end of this document.

1. List the last name, and employee's supervisor last name of **every** employee in the database.
2. List the first name, last name, salary, plus supervisor first name and salary, for all employees who make more money than their supervisor does.
3. List the SSNs of employees who work on projects that involve university (edu) websites.
4. List the last name and supervisor last name of all employees who work on the same project as their supervisor does.
5. List the employee last names and salaries sorted by salary from largest to smallest.
6. List the employee first and last names and their dependent names and birth dates sorted by the children's age for each employee (with the employees sorted alphabetically).
7. List the project name and the department manager last name (the manager of the department that owns the project) for each project.
8. List all employee first and last names and their supervisor last names where both of them (employee and employee's supervisor) are female, sorted by the supervisor last name alphabetically.
9. List all employee first and last names and their department manager's last name where both of them (employee and employee's department manager) are male, sorted by the employee last name alphabetically.
10. List the first and last names of all employees who are either male themselves or have male dependents

Capturing the 4 required items (outlined in blue) on a Windows machine.

The screenshot shows the MySQL Workbench interface on a Windows machine. Four items are outlined in blue:

- Navigator Panel:** Located on the left, showing the 'SCHEMAS' list with 'sys' selected.
- Query Editor:** The central area containing the SQL query: `select * from user_summary;`
- Result Grid:** The table below the query showing execution results for 'user_summary 1'.
- About Dialog Box:** A window titled 'About' showing device specifications for 'UX305CA Signature Edition'.

The Result Grid data is as follows:

user	statements	statement_latency	statement_avg_latency	table_scans
mona	10713	1.75 s	163.01 us	18
root	24	70.40 ms	2.93 ms	3
background	0	0 ps	0 ps	0

The About dialog box shows the following specifications:

- Device name: LAPTOP-6064QG51
- Processor: Intel(R) Core(TM) m3-6Y30 CPU @ 0.90GHz 1.51 GHz
- Installed RAM: 8.00 GB (7.90 GB usable)
- Device ID: B206D63E-E9A0-40C8-99EB-28564DBA0457
- Product ID: 00325-95956-00513-AAOEM
- System type: 64-bit operating system, x64-based processor
- Pen and touch: No pen or touch input is available for this display

Capturing the 4 required items (outlined in blue) on a Linux machine.

The screenshot shows the MySQL Workbench interface on a Linux machine. Four items are outlined in blue:

- Query Editor:** The central area containing two SQL queries. The first query is: `select FName, LName, Salary from EMPLOYEE where salary > 100000;`
- Result Grid:** The table below the query showing execution results for 'EMPLOYEE 37'.
- About Dialog Box:** A window titled 'About' showing system information for 'Ubuntu 18.04.5 LTS'.
- Ubuntu System Information Window:** A window showing the Ubuntu logo and system details.

The Result Grid data is as follows:

#	FName	LName	Salary
1	Anne	Black	128870
2	Gerald	Stevens	138475
3	Catherine	Mills	118246
4	Ernest	Williams	150646
5	Henry	Chavez	172654
6	James	Cook	178300
7	Jason	Harvey	145773

The About dialog box shows the following specifications:

- Device name: system76-pc
- Memory: 15.5 GiB
- Processor: Intel® Core™ i5-8259U CPU @ 2.30GHz x 8
- Graphics: Intel® Iris(R) Plus Graphics 655 (CFL GT3)
- GNOME: 3.28.2
- OS type: 64-bit
- Disk: 240.8 GB