UCSD Data Science Bootcamp – SQL HW, Part 1 Analysis Results

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**-- 1. List the following details of each employee: employee number, last name, first name, gender, and salary.**

SELECT employees.emp\_no, last\_name, first\_name, gender, salaries.salary, from\_date, to\_date FROM employees

JOIN salaries ON employees.emp\_no = salaries.emp\_no

ORDER BY emp\_no ASC

LIMIT 10;

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**-- 2. List employees who were hired in 1986.**

SELECT emp\_no, last\_name, first\_name, hire\_date FROM employees

WHERE hire\_date BETWEEN '1986-01-01' AND '1986\_12-31' ORDER BY emp\_no LIMIT 10;

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**-- 3. List the manager of each department with the following information: department number, department name, the manager's employee number, last name, first name, and start and end employment dates.**

SELECT departments.dept\_no, dept\_name, dept\_manager.emp\_no, employees.last\_name, employees.first\_name, dept\_manager.from\_date, dept\_manager.to\_date

FROM departments

JOIN dept\_manager ON departments.dept\_no = dept\_manager.dept\_no

JOIN employees ON dept\_manager.emp\_no = employees.emp\_no

ORDER BY departments.dept\_no, dept\_manager.from\_date

LIMIT 10;

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**-- 4. List the department of each employee with the following information: employee number, last name, first name, and department name.**

SELECT employees.emp\_no, last\_name, first\_name, dept\_name FROM employees

JOIN dept\_emp ON employees.emp\_no = dept\_emp.emp\_no

JOIN departments ON dept\_emp.dept\_no = departments.dept\_no

ORDER BY employees.emp\_no

LIMIT 10;

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**-- 5. List all employees whose first name is "Hercules" and last names begin with "B."**

SELECT emp\_no, last\_name, first\_name FROM employees

WHERE first\_name = 'Hercules' AND last\_name LIKE 'B%';

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**-- 6. List all employees in the Sales department, including their employee number, last name, first name, and department name.**

SELECT employees.emp\_no, last\_name, first\_name, dept\_name FROM employees

JOIN dept\_emp ON employees.emp\_no = dept\_emp.emp\_no

JOIN departments ON dept\_emp.dept\_no = departments.dept\_no

WHERE dept\_name = 'Sales'

ORDER BY employees.emp\_no;

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**-- 7. List all employees in the Sales and Development departments, including their employee number, last name, first name, and department name.**

SELECT employees.emp\_no, last\_name, first\_name, dept\_name FROM employees

JOIN dept\_emp ON employees.emp\_no = dept\_emp.emp\_no

JOIN departments ON dept\_emp.dept\_no = departments.dept\_no

WHERE dept\_name = 'Sales' OR dept\_name = 'Development'

ORDER BY employees.emp\_no;

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**-- 8. In descending order, list the frequency count of employee last names, i.e., how many employees share each last name.**

SELECT last\_name, COUNT(last\_name) FROM employees GROUP BY last\_name ORDER BY COUNT(last\_name) DESC;

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-- I'm curious what the most common first names are in the dataset...

SELECT first\_name, COUNT(first\_name) FROM employees GROUP BY first\_name ORDER BY COUNT(first\_name) DESC;

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**Epilogue**

-- Evidence in hand, you march into your boss's office and present the visualization. With a sly grin, your boss thanks you

-- for your work. On your way out of the office, you hear the words, "Search your ID number." You look down at your badge

-- to see that your employee ID number is 499942.

SELECT employees.emp\_no, last\_name, first\_name, dept\_name FROM employees

JOIN dept\_emp ON employees.emp\_no = dept\_emp.emp\_no

JOIN departments ON dept\_emp.dept\_no = departments.dept\_no

WHERE employees.emp\_no = 499942

ORDER BY employees.emp\_no;

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