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

SELECT employees.emp_no, employees.last_name, employees.first_name, employees.sex, salaries.salary
FROM employees
JOIN salaries
ON employees.emp_no = salaries.emp_no;

-- 2. List first name, last name, and hire date for employees who were hired in 1986.

SELECT first_name, last_name, hire_date
FROM employees
WHERE hire_date BETWEEN '1986-01-01' and '1987-01-01'

-- 3. List the manager of each department with the following information: department number, department name, the manager's employee number, last name, first name.

FROM departments
JOIN dept_manager
ON departments.dept_no = dept_manager.dept_no
JOIN employees
ON dept_manager.emp_no = employees.emp_no;

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

SELECT dept_emp.emp_no, employees.last_name, employees.first_name, departments.dept_name
FROM dept_emp
JOIN employees ON dept_emp.emp_no = employees.emp_no
JOIN departments ON dept_emp.dept_no = departments.dept_no;

-- 5. List first name, last name, and sex for employees whose first name is "Hercules" and last names begin with "B."

SELECT first_name, last_name
FROM employees
WHERE first_name = 'Hercules'
AND last_name LIKE 'B%';

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

SELECT dept_emp.emp_no, employees.last_name, employees.first_name, departments.dept_name
FROM dept_emp
JOIN employees ON dept_emp.emp_no = employees.emp_no
JOIN departments ON dept_emp.dept_no = departments.dept_no
WHERE departments.dept_name = 'Sales';

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

SELECT dept_emp.emp_no, employees.last_name, employees.first_name, departments.dept_name
FROM dept_emp
JOIN employees ON dept_emp.emp_no = employees.emp_no
JOIN departments ON dept_emp.dept_no = departments.dept_no
WHERE departments.dept_name = 'Sales' OR departments.dept_name = 'Development';

-- 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) as 'frequency'
FROM employees
GROUP BY last_name
ORDER BY
COUNT(last_name) DESC;