**CURRENT**

CREATE TABLE "employees" (

"emp\_no" INT NOT NULL,

"emp\_title" VARCHAR NOT NULL,

"birth\_date" DATE NOT NULL,

"first\_name" VARCHAR NOT NULL,

"last\_name" VARCHAR NOT NULL,

"sex" VARCHAR NOT NULL,

"hire\_date" DATE NOT NULL,

CONSTRAINT "pk\_employees" PRIMARY KEY (

"emp\_no"

)

);

CREATE TABLE "departments" (

"dept\_no" VARCHAR NOT NULL,

"dept\_name" VARCHAR NOT NULL,

CONSTRAINT "pk\_departments" PRIMARY KEY (

"dept\_no"

)

);

CREATE TABLE "dept\_manager" (

"dept\_no" VARCHAR NOT NULL,

"emp\_no" INT NOT NULL,

CONSTRAINT "pk\_dept\_manager" PRIMARY KEY (

"dept\_no","emp\_no"

)

);

CREATE TABLE "dept\_emp" (

"emp\_no" INT NOT NULL,

"dept\_no" VARCHAR NOT NULL,

CONSTRAINT "pk\_dept\_emp" PRIMARY KEY (

"emp\_no","dept\_no"

)

);

CREATE TABLE "titles" (

"title\_id" VARCHAR NOT NULL,

"title" VARCHAR NOT NULL,

CONSTRAINT "pk\_titles" PRIMARY KEY (

"title\_id"

)

);

CREATE TABLE "salaries" (

"emp\_no" INT NOT NULL,

"salary" INT NOT NULL,

CONSTRAINT "pk\_salaries" PRIMARY KEY (

"emp\_no"

)

);

ALTER TABLE "employees" ADD CONSTRAINT "fk\_employees\_emp\_title" FOREIGN KEY("emp\_title")

REFERENCES "titles" ("title\_id");

ALTER TABLE "dept\_manager" ADD CONSTRAINT "fk\_dept\_manager\_dept\_no" FOREIGN KEY("dept\_no")

REFERENCES "departments" ("dept\_no");

ALTER TABLE "dept\_manager" ADD CONSTRAINT "fk\_dept\_manager\_emp\_no" FOREIGN KEY("emp\_no")

REFERENCES "employees" ("emp\_no");

ALTER TABLE "dept\_emp" ADD CONSTRAINT "fk\_dept\_emp\_emp\_no" FOREIGN KEY("emp\_no")

REFERENCES "employees" ("emp\_no");

ALTER TABLE "dept\_emp" ADD CONSTRAINT "fk\_dept\_emp\_dept\_no" FOREIGN KEY("dept\_no")

REFERENCES "departments" ("dept\_no");

ALTER TABLE "salaries" ADD CONSTRAINT "fk\_salaries\_emp\_no" FOREIGN KEY("emp\_no")

REFERENCES "employees" ("emp\_no");

--DATA ANALYSIS

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

SELECT emp\_no, last\_name, first\_name, sex

FROM employees

SELECT salary

FROM salaries

--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 >= 1/1/1986 AND hire\_date <= 12/31/1986;

--3. List the manager of each department with the following information:

--department number, department name, the manager's employee number, last name, first name.

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

--JOIN employees and departments

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

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.

FROM departments

WHERE dept\_name = 'Sales'

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

FROM departments

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

--8. List the frequency count of employee last names (i.e., how many employees share each last name) in descending order.

SELECT last\_name, COUNT(\*)

FROM employees

GROUP BY last\_name

ORDER BY last\_name

**NEWER CODE**

SELECT employees.emp\_no, employees.last\_name, employees.first\_name, employees.sex, salaries.salary

FROM employees

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