--drop tables if exist

drop table if exists departments;

drop table if exists dept\_emp;

drop table if exists dept\_manager;

drop table if exists employees;

drop table if exists salaries;

drop table if exists titles;

--Use the provided information to create a table schema for each of the six CSV files. Be sure to do the following:

--Remember to specify the data types, primary keys, foreign keys, and other constraints.

--For the primary keys, verify that the column is unique. Otherwise, create a composite keyLinks to an external site., which takes two primary keys to uniquely identify a row.

--Be sure to create the tables in the correct order to handle the foreign keys.

--Import each CSV file into its corresponding SQL table.

--create table for titles

create table "titles" (

"title\_id" varchar(10) not null,

"title" varchar(30) not null,

constraint "pk\_titles" primary key ("title\_id")

);

--check table

select \*

from titles

--import data

--confirm data uploaded

select \*

from titles

--create table for departments

create table "departments" (

"dept\_no" varchar(10) not null,

"dept\_name" varchar(30) not null,

constraint "pk\_departments" primary key ("dept\_no")

);

--check table

select \*

from departments

--import data

--confirm data uploaded

select \*

from departments

--create table for employees

create table "employees" (

"emp\_no" integer not null,

"emp\_title\_id" varchar(10) not null,

"birth\_date" date not null,

"first\_name" varchar(20) not null,

"last\_name" varchar(20) not null,

"sex" varchar(1) not null,

"hire\_date" date,

primary key ("emp\_no")

);

--check table

select \*

from employees

--import data

--confirm data uploaded

select \*

from employees

--create table for dept\_manager

create table "dept\_manager" (

"dept\_no" varchar(10) not null,

"emp\_no" integer not null

);

--check table

select \*

from dept\_manager

--import data

--confirm data uploaded

select \*

from dept\_manager

--create table for salaries

create table "salaries" (

"emp\_no" integer not null,

"salary" integer not null

);

--check table

select \*

from salaries

--import data

--confirm data uploaded

select \*

from salaries

--create table for dept\_emp

create table "dept\_emp" (

"emp\_no" integer not null,

"dept\_no" varchar(10) not null

);

--check table

select \*

from dept\_emp

--import data

--confirm data uploaded

select \*

from dept\_emp

select \* from departments;

select \* from titles;

select \* from employees;

select \* from dept\_emp;

select \* from dept\_manager;

select \* from salaries;

--Data Analysis

--List the employee number, last name, first name, sex, and salary of each employee. (saved in views Employee\_data)

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;

--List the first name, last name, and hire date for the employees who were hired in 1986. (saved in views employees\_1986)

select first\_name, last\_name, hire\_date

from employees

where hire\_date between '01/01/1986' and '12/31/1986'

order by hire\_date;

--List the manager of each department along with their department number, department name, employee number, last name, and first name. (saved in views Mgr\_DeptNo\_EmpNo\_Lastname\_Firstname)

select departments.dept\_no, departments.dept\_name, dept\_manager.emp\_no, employees.last\_name, employees.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;

--List the department number for each employee along with that employee’s employee number, last name, first name, and department name. (saved in views Employee\_info)

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;

--List first name, last name, and sex of each employee whose first name is Hercules and whose last name begins with the letter B. (saved in views names\_Hercules\_B)

select employees.first\_name, employees.last\_name, employees.sex

from employees

where first\_name = 'Hercules' and last\_name like 'B%';

--List each employee in the Sales department, including their employee number, last name, and first 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::text = departments.dept\_no::text

WHERE departments.dept\_name::text = 'Sales'::text;

--List each employee 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::text = departments.dept\_no::text

WHERE departments.dept\_name::text = 'Sales'::text OR departments.dept\_name::text = 'Development'::text;

--List the frequency counts, in descending order, of all the employee last names (that is, how many employees share each last name).

SELECT employees.last\_name,

count(employees.last\_name) AS frequency

FROM employees

GROUP BY employees.last\_name

ORDER BY (count(employees.last\_name)) DESC;