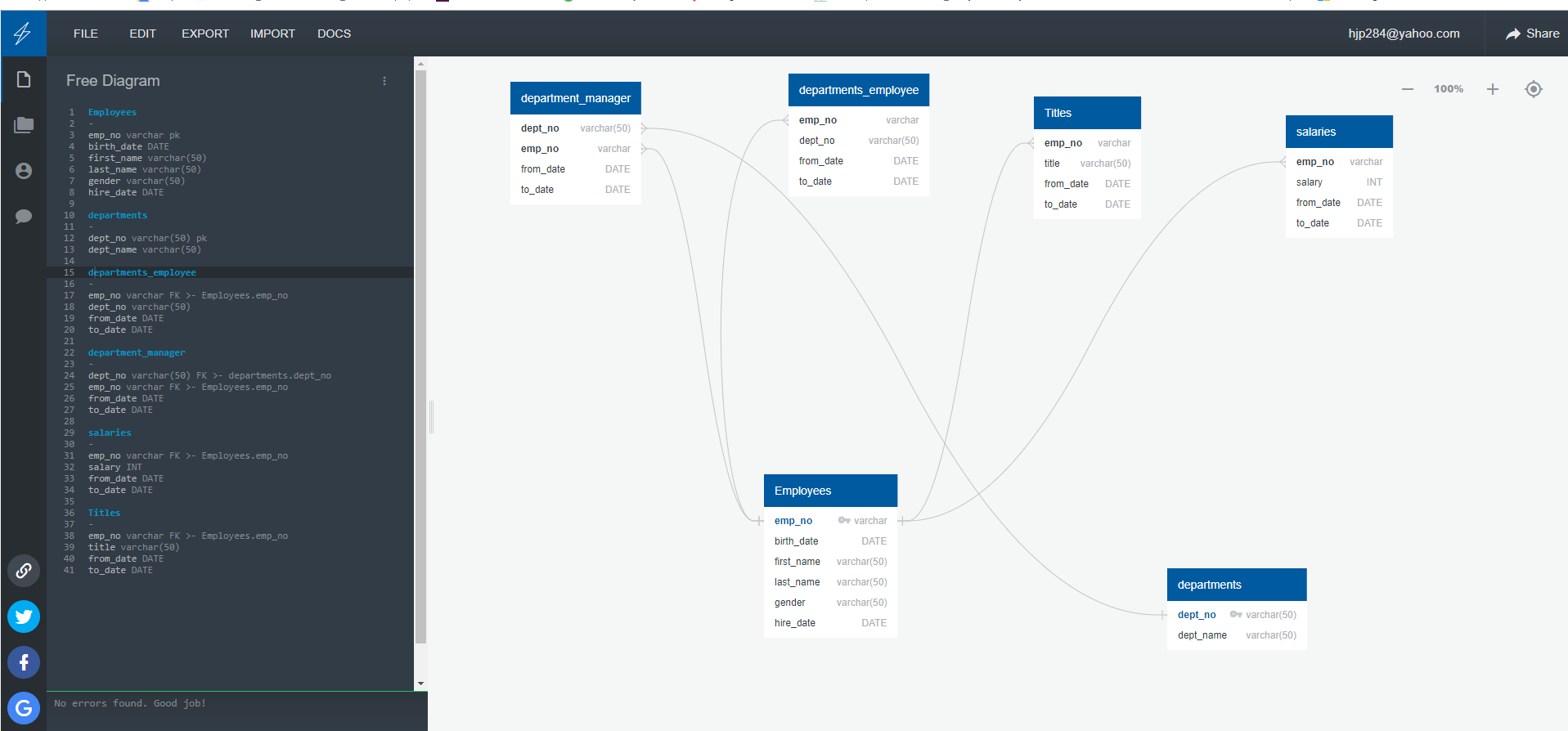
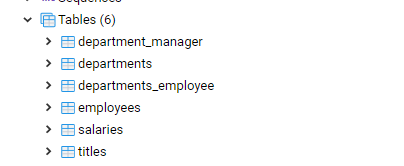
**Hardik Patel HW9**

**Data Modeling**

[https://app.quickdatabasediagrams.com/#/d/jbfftI](https://app.quickdatabasediagrams.com/#/d/jbfftI)

**Data Engineering**



**Data Analysis**

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

Select emp.emp\_no, emp.last\_name, emp.first\_name, emp.gender, sal.salary

from employees as emp

Join salaries as sal

On emp.emp\_no = sal.emp\_no;



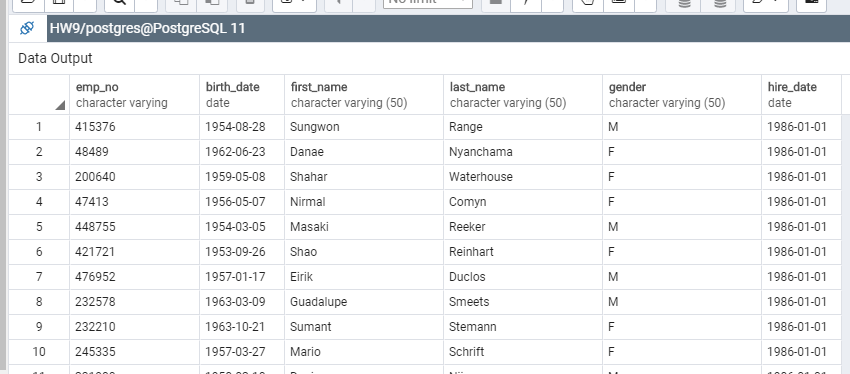
1. List employees who were hired in 1986.

Select \*

from employees as emp

where extract (year from emp.hire\_date)=1986

order by hire\_date;



1. 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 emp.emp\_no, emp.first\_name, emp.last\_name, dept.dept\_no, dept.dept\_name, dm.from\_date, dm.to\_date

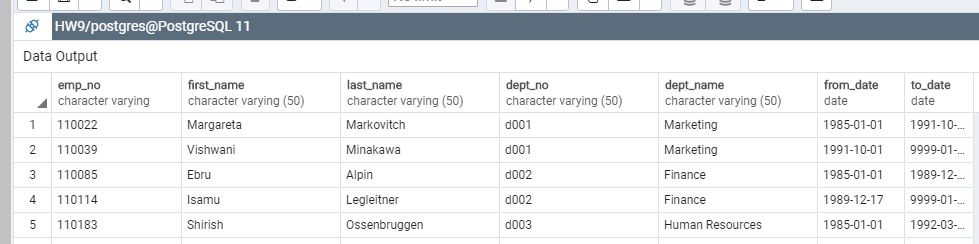
from employees as emp

Join department\_manager as dm

On emp.emp\_no = dm.emp\_no

Join departments as dept

on dept.dept\_no = dm.dept\_no;



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

Select de.emp\_no, emp.last\_name, emp.first\_name, dept.dept\_name

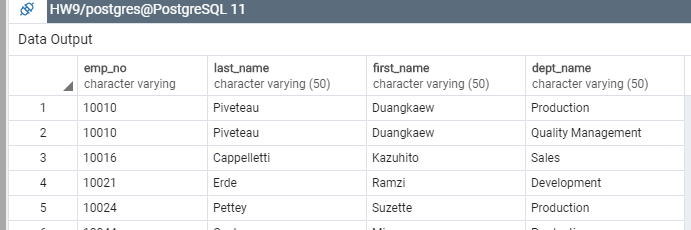
from employees as emp

join departments\_employee as de

On emp.emp\_no = de.emp\_no

Join departments as dept

on dept.dept\_no = de.dept\_no

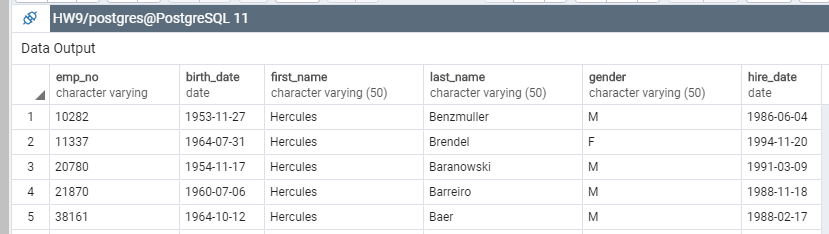


1. List all employees whose first name is "Hercules" and last names begin with "B."

select \* from employees

where first\_name = 'Hercules'

and last\_name like 'B%'



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

Select de.emp\_no, emp.last\_name, emp.first\_name, dept.dept\_name

from employees as emp

join departments\_employee as de

On emp.emp\_no = de.emp\_no

Join departments as dept

on dept.dept\_no = de.dept\_no

where dept\_name = 'Sales'



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

Select de.emp\_no, emp.last\_name, emp.first\_name, dept.dept\_name

from employees as emp

join departments\_employee as de

On emp.emp\_no = de.emp\_no

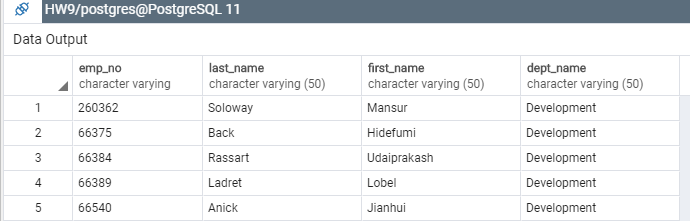
Join departments as dept

on dept.dept\_no = de.dept\_no

where dept\_name = 'Sales'

OR dept\_name = 'Development'

order by dept\_name



1. 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 lastname\_count

from employees

group by last\_name

order by lastname\_count desc

