-- Use Inner Join for departments and dept\_manager tables

SELECT departments.dept\_name,

dept\_manager.emp\_no,

dept\_manager.from\_date,

dept\_manager.to\_date

FROM departments

INNER JOIN dept\_manager

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

--Joining retirement\_info and dept\_emp tables using a Left Join

SELECT retirement\_info.emp\_no,

retirement\_info.first\_name,

retirement\_info.last\_name,

dept\_emp.to\_date

FROM retirement\_info

LEFT JOIN dept\_emp

ON retirement\_info.emp\_no = dept\_emp.emp\_no;

--Use aliases for code readability. Each table name

--can be shortened to a nickname.

SELECT ri.emp\_no,

ri.first\_name,

ri.last\_name,

de.to\_date

FROM retirement\_info as ri

LEFT JOIN dept\_emp as de

ON ri.emp\_no = de.emp\_no;

--These aliases only exist within the query and are NOT committed

--to the databases.

--Update our other join

--Joining departments and dept\_manager tables.

SELECT departments.dept\_name,

dept\_manager.emp\_no,

dept\_manager.from\_date,

dept\_manager.to\_date

FROM departments

INNER JOIN dept\_manager

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

--Joining departments and dept\_manager using aliases.

SELECT d.dept\_name

dm.emp\_no,

dm.from\_date,

dm.to\_data

FROM departments as d

INNER JOIN dept\_manager as dm

ON d.dept\_no = dm.dept\_no;

--USE LEFT JOIN for retirment\_info and dept\_emp tables.

--Now that we have alist of all retirement-eligible employees,

--it is imp;ortant to make sure that they are actually still employed

--at PH. To do this , we're going to perform another join, this time

--between the retirement\_info and dept\_emp tables.

--The basic information in the new list is:

-- > Employee number

-- > First name

-- > Last name

-- > to\_date

--In the pgAdmin query editor, let's begin by specifying these columns and tables.

SELECT ri.emp\_no,

ri.first\_name,

ri.last\_name,

de.to\_date

-- Next, we'll need to create a new table to hold the information.

-- Let's name it "current\_emp"

INTO current\_emp

-- The next step is the add the code that will join these two tables.

FROM retirement\_info as ri

LEFT JOIN dept\_emp as de

ON ri.emp\_no = de.emp\_no

WHERE de.to\_date = ('9999-01-01');

--We need a count of employees for each department.

--In Postgres, 'GROUP BY' is used when we want to group rows of identical

--data together in a table. It is precisely the clause that we want to

--group separate employees into their departments.

--In the query editor, join the 'current\_emp' and 'dept\_emp' tables.

--Employee Count by department number

SELECT COUNT (ce.emp\_no), de.dept\_no

INTO current\_emp\_count

FROM current\_emp as ce

LEFT JOIN dept\_emp as de

ON ce.emp\_no = de.emp\_no

GROUP BY de.dept\_no

ORDER BY de.dept\_no;

--Code for Employee Information

SELECT e.first\_name,

e.last\_name,

e.gender,

s.salary,

de.to\_date

INTO emp\_info

FROM employees as e

INNER JOIN salaries as s

ON (e.emp\_no = s.emp\_no)

INNER JOIN dept\_emp as de

ON (e.emp\_no = de.emp\_no)

WHERE (e.birth\_date BETWEEN '1952-01-01' AND '1955-12-31')

AND (e.hire\_date BETWEEN '1985-01-01' AND '1988-12-31')

AND (de.to\_date = '9999-01-01');

SELECT \* FROM emp\_info;

SELECT COUNT (to\_date) FROM emp\_info;

SELECT \* FROM retirement\_info;

SELECT COUNT (emp\_no) FROM retirement\_info;

SELECT \* FROM current\_emp\_count;

--Code for Employee Information

SELECT e.first\_name,

e.last\_name,

e.gender,

s.salary,

de.to\_date

INTO emp\_info

FROM employees as e

INNER JOIN salaries as s

ON (e.emp\_no = s.emp\_no)

INNER JOIN dept\_emp as de

ON (e.emp\_no = de.emp\_no)

WHERE (e.birth\_date BETWEEN '1952-01-01' AND '1955-12-31')

AND (e.hire\_date BETWEEN '1985-01-01' AND '1988-12-31')

AND (de.to\_date = '9999-01-01');

SELECT \* FROM emp\_info;

SELECT COUNT (to\_date) FROM emp\_info;

SELECT \* FROM retirement\_info;

SELECT COUNT (emp\_no) FROM retirement\_info;

SELECT \* FROM current\_emp\_count;

-- Create a list of managers for each department

-- Use Inner Join for departments and dept\_manager tables

SELECT d.dept\_name,

d.dept\_no,

dm.emp\_no,

e.last\_name,

e.first\_name,

dm.from\_date,

dm.to\_date

FROM departments as d

INNER JOIN dept\_manager as dm

ON d.dept\_no = dm.dept\_no

--Use second INNER JOIN to managers' first and last names.

INNER JOIN employees as e

ON (dm.emp\_no = e.emp\_no);

-- Create a list of CURRENT managers for all department

-- Use Inner Join for departments and dept\_manager tables

SELECT d.dept\_name,

d.dept\_no,

dm.emp\_no,

e.last\_name,

e.first\_name,

dm.from\_date,

dm.to\_date

FROM departments as d

INNER JOIN dept\_manager as dm

ON d.dept\_no = dm.dept\_no

--Use second INNER JOIN to managers' first and last names.

INNER JOIN employees as e

ON (dm.emp\_no = e.emp\_no)

--Include the following code to get the list of CURRENT DEPARTMENT MANAGERS.

WHERE (dm.to\_date = '9999-01-01');

--Create a list of all the retirment eligable employess

--in each department and then order them by department number.

--Output the list to a table called retirement\_orderbydept\_info

SELECT ri.emp\_no,

ri.first\_name,

ri.last\_name,

de.dept\_no,

d.dept\_name

INTO retirement\_orderbydept\_info

FROM retirement\_info as ri

LEFT JOIN dept\_emp as de

ON (ri.emp\_no = de.emp\_no)

LEFT JOIN departments as d

ON (d.dept\_no = de.dept\_no)

WHERE (de.to\_date = '9999-01-01')

ORDER BY de.dept\_no;

--Create a list of all the retirment eligable employess

--in each department and then order them by dept\_no and last\_name.

--Output the list to a table called retirement\_salary\_info

SELECT ri.emp\_no,

ri.first\_name,

ri.last\_name,

de.dept\_no,

d.dept\_name,

s.salary,

de.to\_date

INTO retirement\_salary\_info

FROM retirement\_info as ri

LEFT JOIN dept\_emp as de

ON (ri.emp\_no = de.emp\_no)

LEFT JOIN departments as d

ON (d.dept\_no = de.dept\_no)

LEFT JOIN salaries as s

ON (ri.emp\_no = s.emp\_no)

WHERE (de.to\_date = '9999-01-01')

ORDER BY de.dept\_no, ri.last\_name;

--Sum of salaries for retirement eligable employees for each dept\_no.

SELECT SUM(salary), dept\_no

INTO salary\_sum\_bygroupno

FROM retirement\_salary\_info

GROUP BY dept\_no

ORDER BY dept\_no ASC;

--Sum of salaries for retirement eligable employees for each dept\_no and each dept\_name.

SELECT d.dept\_name,

ssb.dept\_no,

ssb.sum

INTO salary\_sum\_bygroupname

FROM salary\_sum\_bygroupno as ssb

LEFT JOIN departments as d

ON (ssb.dept\_no = d.dept\_no);

--Queries used to check different outputs after join

SELECT \* FROM retirement\_salary\_info;

SELECT COUNT (emp\_no) FROM retirement\_salary\_info;

SELECT \* FROM retirement\_bydept\_info;

SELECT COUNT (emp\_no) FROM retirement\_bydept\_info;

SELECT \* FROM current\_emp;

SELECT COUNT (emp\_no) FROM current\_emp;

SELECT \* FROM salary\_sum\_bygroupno;

SELECT \* FROM salary\_sum\_bygroupname;