# **Practice SQL JOIN Methods\_V2**

**Inner JOIN Practice**

1. Employees and departments  (*Employees* & *Departments* tables)
   1. For each employee, display the first name, last name, department number and department name.

select e.first\_name, e.last\_name, e.department\_id, d.department\_name

from tblemployees e , tbldepartments d

where e.department\_id= d.department\_id;

* 1. Display the first name, last name, department number and department name, for all employees in departments 50 or 90.

select e.first\_name, e.last\_name, e.department\_id, d.department\_name

from tblemployees e , tbldepartments d

where e.department\_id= d.department\_id and d.department\_id in (50,90);

1. Departments and locations (*Departments*, Employees & *Locations* tables)
   1. For each department, display the department name, city, and state province.

select d.department\_name, l.city, l.state\_province

from tbldepartments d, tbllocations l

where l.location\_id = d.location\_id;

* 1. For each employee, display the full name, department name, city, and state province.

select (e.first\_name || e.last\_name) as full\_name ,d.department\_name, l.city, l.state\_province

from tblemployees e , tbldepartments d , tbllocations l

where e.department\_id= d.department\_id and l.location\_id = d.location\_id;

* 1. Display the full name, department name, city, and state province, for all employees whose last name contains the letter *a*.

select e.first\_name || e.last\_name as full\_name ,d.department\_name, l.city, l.state\_province

from tblemployees e , tbldepartments d , tbllocations l

where e.department\_id= d.department\_id and l.location\_id = d.location\_id and e.last\_name like '%a%';

**None Equi JOIN Practice**

1. For each employee, display the first name, salary, and job grade (*Employees* & *Job\_Grades* tables)

**Outer JOIN Practice**

1. Employees & departments
   1. Display the first name, last name, department number and department name, for all employees including those without any department.

select e.first\_name, e.last\_name, e.department\_id ,d.department\_name

from tblemployees e left outer join

tbldepartments d on e.department\_id is null or e.department\_id= d.department\_id;

* 1. Modify your query to display all departments including departments without any employees.

select e.first\_name, e.last\_name, e.department\_id ,d.department\_name

from tblemployees e right outer join

tbldepartments d on d.department\_id is null or e.department\_id= d.department\_id;

**Self JOIN Practice**

1. Employees and managers (*Employees* table)
   1. For each employee, display the last name, and the manager’s last name.

select e.last\_name, em.last\_name

from tblemployees e , tblemployees em

where e.manager\_id = em.employee\_id;

* 1. Modify your query to display all employees including those without any manager.

select e.last\_name, em.last\_name

from tblemployees e left outer join

tblemployees em on e.manager\_id = em.employee\_id and e.department\_id= em.department\_id;

1. Display the first name, last name, and department number for all employees who work in the same department as employee whose last name is “King”.

select e.first\_name, e.last\_name, e.department\_id from tblemployees e,

tblemployees em where em.last\_name ='King' and e.department\_id= em.department\_id;

1. Display the last name and salary for all employees who earn less than employee number 103.

select e.first\_name, e.salary from tblemployees e,

tblemployees em where e.salary < em.salary and em.employee\_id=103;