

## Exp-08

# WORKING WITH MULTIPLE TABLES

```
CREATE TABLE employees_2 (  
    employee_id NUMBER PRIMARY KEY,  
    last_name VARCHAR2(50),  
    job_id VARCHAR2(20),  
    manager_id NUMBER,  
    hire_date DATE,  
    salary NUMBER,  
    commission_pct NUMBER,  
    department_id NUMBER  
);
```

```
CREATE TABLE departments_2 (  
    department_id NUMBER PRIMARY KEY,  
    department_name VARCHAR2(50),  
    location_id NUMBER  
);
```

```
CREATE TABLE locations (  
    location_id NUMBER PRIMARY KEY,  
    city VARCHAR2(50)  
);
```

```
CREATE TABLE job_grades_1 (  
    grade_level VARCHAR2(2),  
    lowest_sal NUMBER,  
    highest_sal NUMBER  
);
```

```
INSERT INTO locations VALUES (1000, 'New York');
```

```
INSERT INTO locations VALUES (1400, 'Toronto');
```

```
INSERT INTO locations VALUES (1700, 'Sydney');
```

```
INSERT INTO departments_2 VALUES (10, 'Administration', 1000);
```

```
INSERT INTO departments_2 VALUES (20, 'IT', 1400);
```

```
INSERT INTO departments_2 VALUES (80, 'Sales', 1700);
```

```
INSERT INTO employees_2 VALUES (101, 'King', 'AD_PRES', NULL, DATE '2003-06-17',  
24000, NULL, 10);
```

```
INSERT INTO employees_2 VALUES (102, 'Smith', 'IT_PROG', 101, DATE '2005-01-15',  
6000, NULL, 20);
```

```
INSERT INTO employees_2 VALUES (103, 'Matos', 'SA_REP', 102, DATE '2006-03-10',  
5000, 0.15, 80);
```

```
INSERT INTO employees_2 VALUES (104, 'Davies', 'SA_REP', 102, DATE '2004-08-01',  
4800, 0.10, 80);
```

```
INSERT INTO job_grades_1 VALUES ('A', 1000, 2999);
```

```
INSERT INTO job_grades_1 VALUES ('B', 3000, 5999);
```

```
INSERT INTO job_grades_1 VALUES ('C', 6000, 9999);
```

```
INSERT INTO job_grades_1 VALUES ('D', 10000, 24000);
```

```
Select e.last_name,e.department_id,d.department_name from employees_2 e  
join departments_2 d on e.department_id=d.department_id
```

```
SELECT DISTINCT e.job_id, d.location_id, l.city  
FROM employees_2 e  
JOIN departments_2 d ON e.department_id = d.department_id  
JOIN locations l ON d.location_id = l.location_id  
WHERE e.department_id = 80;
```

```
SELECT e.last_name, d.department_name, d.location_id, l.city  
FROM employees_2 e  
JOIN departments_2 d ON e.department_id = d.department_id  
JOIN locations l ON d.location_id = l.location_id  
WHERE e.commission_pct IS NOT NULL;
```

```
SELECT e.last_name, d.department_name
FROM employees_2 e
JOIN departments_2 d ON e.department_id = d.department_id
WHERE LOWER(e.last_name) LIKE '%a%';
```

```
SELECT e.last_name, e.job_id, e.department_id, d.department_name
FROM employees_2 e
JOIN departments_2 d ON e.department_id = d.department_id
JOIN locations l ON d.location_id = l.location_id
WHERE l.city = 'Toronto';
```

```
SELECT e.last_name AS Employee, e.employee_id AS Emp#,
       m.last_name AS Manager, m.employee_id AS Mgr#
FROM employees_2 e
LEFT JOIN employees_2 m ON e.manager_id = m.employee_id;
```

```
SELECT e.last_name AS Employee, e.employee_id AS Emp#,
       m.last_name AS Manager, m.employee_id AS Mgr#
FROM employees_2 e
JOIN employees_2 m ON e.manager_id = m.employee_id
ORDER BY e.employee_id;
```

```
SELECT e1.last_name AS Employee,
       e1.department_id AS Dept#,
       e2.last_name AS Colleague
FROM employees_2 e1
JOIN employees_2 e2
    ON e1.department_id = e2.department_id
WHERE e1.last_name <> e2.last_name;
```

```
DESC job_grades_1;
```

```
SELECT e.last_name,  
       e.job_id,  
       d.department_name,  
       e.salary,  
       j.grade_level  
FROM employees_2 e  
JOIN departments_2 d  
    ON e.department_id = d.department_id  
JOIN job_grades_1 j  
    ON e.salary BETWEEN j.lowest_sal AND j.highest_sal;
```

```
SELECT last_name, hire_date  
FROM employees_2  
WHERE hire_date > (  
    SELECT hire_date  
    FROM employees_2  
    WHERE last_name = 'Davies');
```

```
Select e.last_name as Employee,e.hire_date as "Emp Hired",  
       m.last_name As Manager,m.hire_date as "Mgr Hired"  
from employees_2 e  
join employees_2 m on e.manager_id = m.employee_id  
where e.hire_date<m.hire_date
```