

CREATION OF ALL TABLES

```
1 CREATE TABLE employees (  
2     employee_id NUMBER PRIMARY KEY,  
3     first_name VARCHAR2(50),  
4     last_name VARCHAR2(50),  
5     job_id VARCHAR2(15),  
6     salary NUMBER(8,2),  
7     commission_pct NUMBER(5,2),  
8     hire_date DATE,  
9     manager_id NUMBER,  
10    department_id NUMBER  
11 );  
12
```

Results Explain Describe Saved SQL History

Table created.

0.03 seconds

```
1 CREATE TABLE departments (  
2     department_id NUMBER PRIMARY KEY,  
3     department_name VARCHAR2(50),  
4     location_id NUMBER  
5 );  
6
```

Results Explain Describe Saved SQL History

Table created.

0.05 seconds

```
1 CREATE TABLE locations (  
2     location_id NUMBER PRIMARY KEY,  
3     city VARCHAR2(50)  
4 );  
5
```

Results Explain Describe Saved SQL History

Table created.

0.04 seconds

```
1 CREATE TABLE job_grades (  
2     grade_level VARCHAR2(2) PRIMARY KEY,  
3     lowest_sal NUMBER(8,2),  
4     highest_sal NUMBER(8,2)  
5 );  
6
```

Results Explain Describe Saved SQL History

Table created.

0.05 seconds

REQUIRED ALL TABLE

```
1 select * from employees;
```

Results Explain Describe Saved SQL History

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	JOB_ID	SALARY	COMMISSION_PCT	HIRE_DATE	MANAGER_ID	DEPARTMENT_ID
102	Jane	Smith	Stock Clerk	9000	-	6/10/1998	101	50
105	Mary	Brown	Sales Rep	15000	2	5/18/1999	100	20
101	John	Doe	Sales Rep	12000	15	3/21/1997	100	20
104	Bob	Lee	Stock Clerk	8000	-	11/22/1996	100	50
103	Alice	Johnson	Sales Rep	10000	1	1/5/1998	102	20

5 rows returned in 0.03 seconds [Download](#)

```
1 select * from departments;
```

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
50	Stock	200
30	HR	300
20	Sales	100

3 rows returned in 0.01 seconds [Download](#)

```
1 select * from locations;
```

LOCATION_ID	CITY
100	New York
200	Toronto
300	London

3 rows returned in 0.01 seconds [Download](#)

```
1 select * from job_grades;
```

GRADE_LEVEL	LOWEST_SAL	HIGHEST_SAL
A	1000	5000
D	15001	20000
B	5001	10000
C	10001	15000

4 rows returned in 0.02 seconds [Download](#)

ANSWERS

1.

```
1 SELECT e.last_name, e.department_id, d.department_name
2 FROM employees e
3 JOIN departments d ON e.department_id = d.department_id;
4
```

LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Smith	50	Stock
Brown	20	Sales
Doe	20	Sales
Lee	50	Stock
Johnson	20	Sales

5 rows returned in 0.01 seconds [Download](#)

2.

```

1  SELECT DISTINCT e.job_id, d.location_id
2  FROM employees e
3  JOIN departments d ON e.department_id = d.department_id
4  WHERE d.department_id = 80;
5

```

Results Explain Describe Saved SQL History

no data found

3.

```

1  SELECT e.last_name, d.department_name, d.location_id, l.city
2  FROM employees e
3  JOIN departments d ON e.department_id = d.department_id
4  JOIN locations l ON d.location_id = l.location_id
5  WHERE e.commission_pct IS NOT NULL;
6

```

Results Explain Describe Saved SQL History

LAST_NAME	DEPARTMENT_NAME	LOCATION_ID	CITY
Brown	Sales	100	New York
Doe	Sales	100	New York
Johnson	Sales	100	New York

3 rows returned in 0.02 seconds [Download](#)

4.

```

1  SELECT e.last_name, d.department_name
2  FROM employees e
3  JOIN departments d ON e.department_id = d.department_id
4  WHERE e.last_name LIKE '%a%';
5

```

Results Explain Describe Saved SQL History

no data found

5.

```

1  SELECT e.last_name, e.job_id, e.department_id, d.department_name
2  FROM employees e
3  JOIN departments d ON e.department_id = d.department_id
4  JOIN locations l ON d.location_id = l.location_id
5  WHERE l.city = 'Toronto';
6

```

Results Explain Describe Saved SQL History

LAST_NAME	JOB_ID	DEPARTMENT_ID	DEPARTMENT_NAME
Smith	Stock Clerk	50	Stock
Lee	Stock Clerk	50	Stock

2 rows returned in 0.01 seconds [Download](#)

6.

```

1 SELECT e.last_name AS "Employee", e.employee_id AS "Emp#", m.last_name AS "Manager", m.employee_id AS "Mgr#"
2 FROM employees e
3 LEFT JOIN employees m ON e.manager_id = m.employee_id;
4

```

Employee	Emp#	Manager	Mgr#
Johnson	103	Smith	102
Smith	102	Doe	101
Brown	105	-	-
Doe	101	-	-
Lee	104	-	-

5 rows returned in 0.01 seconds [Download](#)

7.

```

1 SELECT e.last_name, e.employee_id, m.last_name AS "Manager", m.employee_id AS "Mgr#"
2 FROM employees e
3 LEFT JOIN employees m ON e.manager_id = m.employee_id
4 ORDER BY e.employee_id;
5

```

LAST_NAME	EMPLOYEE_ID	Manager	Mgr#
Doe	101	-	-
Smith	102	Doe	101
Johnson	103	Smith	102
Lee	104	-	-
Brown	105	-	-

5 rows returned in 0.01 seconds [Download](#)

8.

```

1 SELECT e1.last_name AS "Employee", e1.department_id AS "Dept#", e2.last_name AS "Same Dept Employee"
2 FROM employees e1
3 JOIN employees e2 ON e1.department_id = e2.department_id
4 WHERE e1.employee_id = 101;
5

```

Employee	Dept#	Same Dept Employee
Doe	20	Brown
Doe	20	Doe
Doe	20	Johnson

3 rows returned in 0.01 seconds [Download](#)

9.

```

1 SELECT e.first_name, e.last_name, e.job_id, d.department_name, e.salary, j.grade_level
2 FROM employees e
3 JOIN departments d ON e.department_id = d.department_id
4 JOIN job_grades j ON e.salary BETWEEN j.lowest_sal AND j.highest_sal;
5

```

FIRST_NAME	LAST_NAME	JOB_ID	DEPARTMENT_NAME	SALARY	GRADE_LEVEL
Bob	Lee	Stock Clerk	Stock	8000	B
Jane	Smith	Stock Clerk	Stock	9000	B
Alice	Johnson	Sales Rep	Sales	10000	B
John	Doe	Sales Rep	Sales	12000	C
Mary	Brown	Sales Rep	Sales	15000	C

5 rows returned in 0.02 seconds [Download](#)

10.

```

1 SELECT first_name, last_name, hire_date
2 FROM employees
3 WHERE hire_date > (SELECT hire_date FROM employees WHERE last_name = 'Davies');
4

```

Results	Explain	Describe	Saved SQL	History
no data found				

11.

```

1 SELECT e.first_name AS "Employee", e.last_name AS "Employee", e.hire_date AS "Emp Hired",
2        m.first_name AS "Manager", m.last_name AS "Manager", m.hire_date AS "Mgr Hired"
3 FROM employees e
4 JOIN employees m ON e.manager_id = m.employee_id
5 WHERE e.hire_date < m.hire_date;
6

```

Employee	Employee	Emp Hired	Manager	Manager	Mgr Hired
Alice	Johnson	1/5/1998	Jane	Smith	6/10/1998

1 rows returned in 0.01 seconds [Download](#)