

1. Write a query to display the last name, department number, and department name for all employees.

```

1  SELECT e.last_name,
2      d.department_id,
3      d.department_name
4  FROM employees e
5  JOIN departments d
6  ON e.department_id = d.department_id;
7

```

Results			
Explain Describe Saved SQL History			
LAST_NAME	DEPARTMENT_ID	DEPARTMENT_NAME	
Doe	10	IT	
Junior	20	Human Resources	

2. Create a unique listing of all jobs that are in department 80. Include the location of the department

in the output.

```

1  SELECT DISTINCT e.job_id,
2      d.location_id
3  FROM employees e
4  JOIN departments d
5  ON e.department_id = d.department_id
6  WHERE e.department_id = 80;
7

```

Results			
Explain Describe Saved SQL History			
JOB_ID	LOCATION_ID		
SA_REP	1000		
SA_MAN	1000		

3. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission

```

1  SELECT e.last_name,
2      d.department_name,
3      d.location_id,
4      l.city
5  FROM employees e
6  JOIN departments d
7  ON e.department_id = d.department_id
8  JOIN locations l
9  ON d.location_id = l.location_id
10 WHERE e.commission_pct IS NOT NULL;
11

```

Results				
Explain Describe Saved SQL History				
LAST_NAME	DEPARTMENT_NAME	LOCATION_ID	CITY	
Smith	Sales	1000	Toronto	
Johnson	Sales	1000	Toronto	

4. Display the employee last name and department name for all employees who have an a(lowercase) in their last names.

```

1  SELECT e.last_name,
2      d.department_name
3  FROM employees e
4  JOIN departments d
5      ON e.department_id = d.department_id
6  WHERE e.last_name LIKE '%a%';
7

```

Results		Explain	Describe	Saved SQL	History
		LAST_NAME		DEPARTMENT_NAME	
	Garcia			Sales	
	Santos			Human Resources	

5. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.

```

1  SELECT e.last_name,
2      e.job_id,
3      d.department_id,
4      d.department_name
5  FROM employees e
6  JOIN departments d
7      ON e.department_id = d.department_id
8  JOIN locations l
9      ON d.location_id = l.location_id
10 WHERE l.city = 'Toronto';
11

```

Results		Explain	Describe	Saved SQL	History
		LAST_NAME	JOB_ID	DEPARTMENT_ID	DEPARTMENT_NAME
	Smith	Smith	SA_REP	80	Sales
	Garcia	Garcia	SA_REP	80	Sales
	Johnson	Johnson	SA_MAN	80	Sales

6. Display the employee last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, Respectively

```

1  SELECT e.last_name AS Employee,
2      e.employee_id AS Emp#,
3      m.last_name AS Manager,
4      m.employee_id AS Mgr#
5  FROM employees e
6  LEFT JOIN employees m
7      ON e.manager_id = m.employee_id;
8

```

Results		Explain	Describe	Saved SQL	History
		EMPLOYEE	EMP#	MANAGER	MGR#
	shakes	shakes	176	-	-
	Santos	Santos	107	-	-
	Revera	Revera	300	-	-
	Doe	Doe	1002	-	-
	Junior	Junior	175	-	-
	Smith	Smith	104	-	-
	Garcia	Garcia	106	-	-
	Johnson	Johnson	105	-	-

7. Modify lab4_6.sql to display all employees including King, who has no manager. Order the results by the employee number.

Language: SQL | Rows: 10 | Clear Command | Find Tables

```

1 SELECT e.last_name AS Employee,
2       e.employee_id AS Emp#,
3       NVL(m.last_name, 'No Manager') AS Manager,
4       NVL(CTE.Mgr#,m.employee_id) AS Mgr#
5 FROM employees e
6 LEFT JOIN employees m
7   ON e.manager_id = m.employee_id
8 ORDER BY e.employee_id;
9

```

Results Explain Describe Saved SQL History

EMPLOYEE	EMP#	MANAGER	MGR#
Smith	104	No Manager	---
Johnson	105	No Manager	---
Garcia	106	No Manager	---
Santos	107	No Manager	---
Junior	175	No Manager	---
shakes	176	No Manager	---
Revera	300	No Manager	---
Doe	1002	No Manager	---

8. Create a query that displays employee last names, department numbers, and all the employees who

work in the same department as a given employee. Give each column an appropriate label

```

1 SELECT e.last_name AS Employee,
2       e.department_id AS Dept#,
3       d.department_name AS Department
4 FROM employees e
5 JOIN departments d
6   ON e.department_id = d.department_id
7 WHERE e.department_id = (
8   SELECT department_id
9   FROM employees
10  WHERE last_name = 'Clark'
11 );
12

```

Results Explain Describe Saved SQL History

EMPLOYEE	DEPT#	DEPARTMENT
Doe	10	IT
Miller	10	IT
Anderson	10	IT
Clark	10	IT
light	10	IT

9. Show the structure of the JOB_GRADES table. Create a query that displays the name, job, department name, salary, and grade for all employees

```

1 SELECT e.last_name,
2       e.job_id,
3       d.department_name,
4       e.salary,
5       j.grade_level
6 FROM employees e
7 JOIN departments d
8   ON e.department_id = d.department_id
9 JOIN job_grades j
10  ON e.salary BETWEEN j.lowest_sal AND j.highest_sal;
11

```

Results Explain Describe Saved SQL History

LAST_NAME	JOB_ID	DEPARTMENT_NAME	SALARY	GRADE_LEVEL
Miller	AD_ASST	IT	4000	A
Anderson	AD_ASST	IT	4200	A
light	AD_ASST	IT	4250	A
Clerk	AD_VP	IT	17000	D
Santos	HR REP	Human Resources	6000	B
Junior	IT_PROG	Human Resources	7500	B
Garcia	SA REP	Sales	7500	B
Smith	SA REP	Sales	8000	B
Johnson	SA MAN	Sales	12000	C

10. Create a query to display the name and hire date of any employee hired after employee Davies.

```
1  SELECT last_name, hire_date
2  FROM employees
3  WHERE hire_date > (
4      SELECT hire_date
5      FROM employees
6      WHERE last_name = 'Davies'
7  );
8 |
```

Results		Explain	Describe	Saved SQL	History
		LAST_NAME		HIRE_DATE	
	Smith			2/20/2010	
	Doe			1/15/2020	
	Miller			7/7/2014	
	Anderson			8/10/2016	
	Garcia			9/15/2015	
	light			8/13/2016	
	Johnson			5/10/2012	
	Santos			11/20/2018	

11. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively.

```
1  SELECT e.last_name AS Employee,
2  e.hire_date AS "Emp Hired",
3  m.last_name AS Manager,
4  m.hire_date AS "Mgr Hired"
5  FROM employees e
6  JOIN employees m
7  ON e.manager_id = m.employee_id
8  WHERE e.hire_date < m.hire_date;
9 |
```

Results		Explain	Describe	Saved SQL	History
		EMPLOYEE	Emp Hired	MANAGER	Mgr Hired
	Harris		5/10/2012	Williams	1/1/2015