EXERCISE-10 USING THE SET OPERATORS

1. The HR department needs a list of department IDs for departments that do not contain the job ID ST_CLERK. Use set operators to create this report.



2. The HR department needs a list of countries that have no departments located in them. Display the country ID and the name of the countries. Use set operators to create this report.

```
1  -- Get all country IDs from the Location table
2  SELECT DISTINCT Country_id
3  FROM Location
4  
5  MINUS
6  
7  -- Get country IDs that have departments located in them
8  SELECT DISTINCT l.Country_id
9  FROM Location l
10  JOIN Department d ON l.Location_id = d.Location_id;
11
```

		COUNTRY_ID		
CA				
1 rows returned in 0.00 seconds	Download			

3. Produce a list of jobs for departments 10, 50, and 20, in that order. Display job ID and department ID using set operators.

```
-- Get job IDs and department IDs for department 10
     SELECT Job id, Department id
     FROM Employees
     WHERE Department_id = 10
     UNION ALL
     -- Get job IDs and department IDs for department 20
     SELECT Job id, Department id
     FROM Employees
     WHERE Department id = 50
11
12
     UNION ALL
13
14
     -- Get job IDs and department IDs for department 50
15
     SELECT Job id, Department id
     FROM Employees
17
     WHERE Department id = 20;
18
```

JOB_ID	DEPARTMENT_ID
ST_CLERK	10
10	20
10	20
50	20
50	20
8 rows returned in 0.01 seconds Download	

4. Create a report that lists the employee IDs and job IDs of those employees who currently have a job title that is the same as their job title when they were initially hired by the company (that is, they changed jobs but have now gone back to doing their original job).

```
WITH Initial Job AS (
         SELECT Employee id, Job id AS Initial Job id
         FROM (
             SELECT Employee id, Job id, ROW NUMBER() OVER (
                 PARTITION BY Employee id ORDER BY Start date ASC
                 ) AS rn
             FROM Job History
         WHERE rn = 1
11
12
     -- Main query to find employees who reverted to their initial job
13
     SELECT e.Employee id, e.Job id
14
     FROM Employees e
15
     JOIN Initial_Job ij ON e.Employee_id = ij.Employee_id
     WHERE e.Job id = ij.Initial Job id;
17
```

no data found

- 5. The HR department needs a report with the following specifications:
 - Last name and department ID of all the employees from the EMPLOYEES table, regardless of whether or not they belong to a department.
 - Department ID and department name of all the departments from the DEPARTMENTS table, regardless of whether or not they have employees working in them Write a compound query to accomplish this.

```
-- Select last name and department ID from the EMPLOYEES table

SELECT Last_Name, Department_id

FROM Employees

UNION

-- Select department name and department ID from the DEPARTMENTS table

SELECT Dept_name AS Last_Name, Dept_id AS Department_id

FROM Department;
```

LAST_NAME	DEPARTMENT_ID
Administration	10
Brown	20
Clark	20
Davis	20
Doe	10
Finance	50
Garcia	30
HR	60
Hernandez	20
IT	40
Legal	70
Lewis	10