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USING SET OPERATION

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.

```
SELECT Department_ID FROM  
DEPARTMENTS  
MINUS  
SELECT DISTINCT Department_ID  
FROM EMPLOYEES  
WHERE Job_ID = 'ST_CLERK';
```

| DEPARTMENT_ID |
|---------------|
| 20 |
| 30 |
| 50 |

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.

```
SELECT DISTINCT Country_ID, Department_Name  
FROM DEPARTMENTS  
MINUS  
SELECT DISTINCT Country_ID, NULL  
FROM DEPARTMENTS  
WHERE Department_ID IS NOT NULL;
```

| COUNTRY_ID | DEPARTMENT_NAME |
|------------|-----------------|
| CA | Marketing |
| UK | Sales |
| US | HR |
| US | IT |
| US | Support |

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

```

SELECT Job_ID, Department_ID
FROM EMPLOYEES
WHERE Department_ID = 10
UNION ALL
SELECT Job_ID, Department_ID
FROM EMPLOYEES
WHERE Department_ID = 50
UNION ALL
SELECT Job_ID, Department_ID
FROM EMPLOYEES
WHERE Department_ID = 20;

```

| JOB_ID | DEPARTMENT_ID |
|----------|---------------|
| ST_CLERK | 10 |
| ANALYST | 50 |
| MANAGER | 20 |

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).

```
SELECT Employee_ID, Job_ID
FROM EMPLOYEES
WHERE Job_ID = Original_Job_ID;
```

| EMPLOYEE_ID | JOB_ID |
|-------------|----------|
| 1 | ST_CLERK |
| 3 | ANALYST |
| 4 | ST_CLERK |
| 4 | ST_CLERK |

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, Department_ID
FROM EMPLOYEES
UNION ALL
SELECT NULL AS Last_Name, Department_ID
FROM DEPARTMENTS;
```

| LAST_NAME | DEPARTMENT_ID |
|-----------|---------------|
| Smith | 10 |
| Johnson | 20 |
| Williams | 30 |
| Brown | 40 |
| Brown | 40 |
| Davis | 50 |
| - | 10 |
| - | 20 |
| - | 30 |
| - | 40 |