

EX NO:7
DATE: 23/10/2024

USING SET OPERATIONS

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.

```
CREATE TABLE departments (  
    department_id INT PRIMARY KEY,  
    department_name VARCHAR(100),  
    country_id VARCHAR(10)  
);
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES (10,  
'Administration', 'US');
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES (20,  
'Marketing', 'UK');
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES (30,  
'IT', 'US');
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES (40,  
'HR', 'AU');
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES(50,  
'Sales', 'IN');
```

```
INSERT INTO departments (department_id, department_name, country_id) VALUES(60,  
'Finance', 'CA');
```

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

DEPARTMENT_ID
10
20
30
40
50
60

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
AU	HR
CA	Finance
IN	Sales
UK	Marketing
US	Administration
US	IT

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
Sales Representative	50
Manager	50
Manager	20
Stock Clerk	20
Sales Representative	20
Sales Representative	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).

Add original id

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

EMPLOYEE_ID	JOB_ID
101	Manager
102	Sales Representative
103	Stock Clerk
104	Manager
105	Sales Representative
176	Sales Representative

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
John	20
Jane	50
Brown	20
Witson	50
Jith	20
Patel	20
-	10
-	20
-	30
-	40
More than 10 rows available. Increase rows selector to view more rows.	