

# DATABASE MANAGEMENT SYSTEM

Prathyush R.

230701240

EXP: 7

## 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

