NAME:	NITHIN S
ROLL NO:	241801191
DEPT:	AI&DS

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';
```

esults | Explain | Describe | Saved SQL | History

DEPARTMENT_ID
10
20
30
50
80

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 country_id, country_name
FROM countries
MINUS
SELECT DISTINCT c.country_id, c.country_name
FROM countries c
JOIN locations l ON c.country_id = l.country_id
JOIN departments d ON l.location_id = d.location_id;
```

Results | Explain | Describe | Saved SQL | History

COUNTRY_ID	COUNTRY_NAME
AU	Australia
CA	Canada
US	United States

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

```sql
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;
```

Results | Explain | Describe | Saved SQL | History | Bottom Splitter

JOB_ID	DEPARTMENT_ID
AD_ASST	10
SA_REP	10
IT_PROG	10
SA_MAN	20
IT_PROG	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).

```sql
SELECT employee_id, job_id
FROM employees
INTERSECT
SELECT employee_id, job_id
FROM job_history;
```

Results | Explain | Describe | Saved SQL | History

EMPLOYEE_ID	JOB_ID
201	SA_REP
202	IT_PROG
204	SA_MAN

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.

```sql
SELECT last_name AS name, department_id, NULL AS department_name
FROM employees
UNION
SELECT NULL AS name, department_id, department_name
FROM departments;
```

Results | Explain | Describe | Saved SQL | History

NAME	DEPARTMENT_ID	DEPARTMENT_NAME
Brown	20	-
Hughes	20	-
Hunter	10	-
Junior	10	-
Lee	30	-
Miller	10	-
-	10	IT
-	20	Human Resources