

Comparing Joins: FULL, LEFT, and INNER JOIN

This exercise involves comparing results when using FULL JOIN, LEFT JOIN, and INNER JOIN between the 'countries' and 'currencies' tables. The goal is to understand how different joins affect the result set and to focus on specific filters such as 'North America' region or NULL country names.

Below is the instruction and query setup:

[Instruction image would be inserted here if available.]

-- SQL Query Using FULL JOIN

```
SELECT name AS country, code, region, basic_unit
FROM countries
FULL JOIN currencies
USING (code)
WHERE region = 'North America' OR name IS NULL
ORDER BY region;
```

-- SQL Query Using LEFT JOIN

```
SELECT name AS country, code, region, basic_unit
FROM countries
LEFT JOIN currencies
USING (code)
WHERE region = 'North America' OR name IS NULL
ORDER BY region;
```

-- SQL Query Using INNER JOIN

```
SELECT name AS country, code, region, basic_unit
FROM countries
INNER JOIN currencies
USING (code)
WHERE region = 'North America'
ORDER BY region;
```

Explanation: These queries demonstrate the differences between FULL JOIN, LEFT JOIN, and INNER JOIN:

1. FULL JOIN: Includes all rows from both tables, with NULLs where there is no match.
2. LEFT JOIN: Includes all rows from the 'countries' table and matching rows from the 'currencies' table, with NULLs for unmatched rows in

'currencies'.

3. INNER JOIN: Includes only rows with matches in both 'countries' and 'currencies'.

The WHERE clause filters for rows in the 'North America' region or NULL country names, and the ORDER BY clause organizes the results by region.