Task 1: Left Join to list all countries and related customers SELECT coun.country\_name\_en AS Country, city.city\_name AS City, cust.customer\_name AS Customer FROM country AS coun LEFT JOIN city ON coun.country\_id = city.country\_id LEFT JOIN customer AS cust ON city.city\_id = cust.city\_id ORDER BY coun.country\_name\_en, city.city\_name, cust.customer\_name;

Task 2: Left and Inner Join to list countries with pairs and related customers SELECT coun.country\_name\_en AS Country, city.city\_name AS City, cust.customer\_name AS Customer FROM country AS coun INNER JOIN city ON coun.country\_id = city.country\_id LEFT JOIN customer AS cust ON city.city\_id = cust.city\_id ORDER BY coun.country\_name\_en, city.city\_name, cust.customer\_name;

## **EXLAINATION:**

## Task 1 (Left Join):

1.SELECT coun.country\_name\_en AS Country, city.city\_name AS City, cust.customer\_name AS Customer: This

selects the desired columns and aliases them for better readability.

FROM country AS coun: This starts with the country table as the base.

- 1.LEFT JOIN city ON coun.country\_id = city.country\_id: This performs a LEFT JOIN with the city table, ensuring that all countries are included, even if they don't have matching cities.
- 2.LEFT JOIN customer AS cust ON city.city\_id = cust.city\_id: This performs another LEFT JOIN with the customer table, ensuring that all cities are included, even if they don't have matching customers.
- 3.ORDER BY coun.country\_name\_en, city.city\_name, cust.customer\_name;: This orders the result for better presentation.

Task 2 (Inner and Left Join):

SELECT coun.country\_name\_en AS Country, city.city\_name AS City, cust.customer\_name AS Customer: Selects the desired columns and aliases them.

- 1. FROM country AS coun: Starts with the country table.
- 2. INNER JOIN city ON coun.country\_id = city.country\_id: This performs an INNER JOIN with the city table. This ensures that only countries that have matching cities are included. This is the main difference from task 1.
- 3. LEFT JOIN customer AS cust ON city.city\_id = cust.city\_id: This performs a LEFT JOIN with the customer table, ensuring that all city-country pairs are included, even if they don't have matching customers.
- 4. ORDER BY coun.country\_name\_en, city.city\_name, cust.customer\_name;:
  Orders the result.