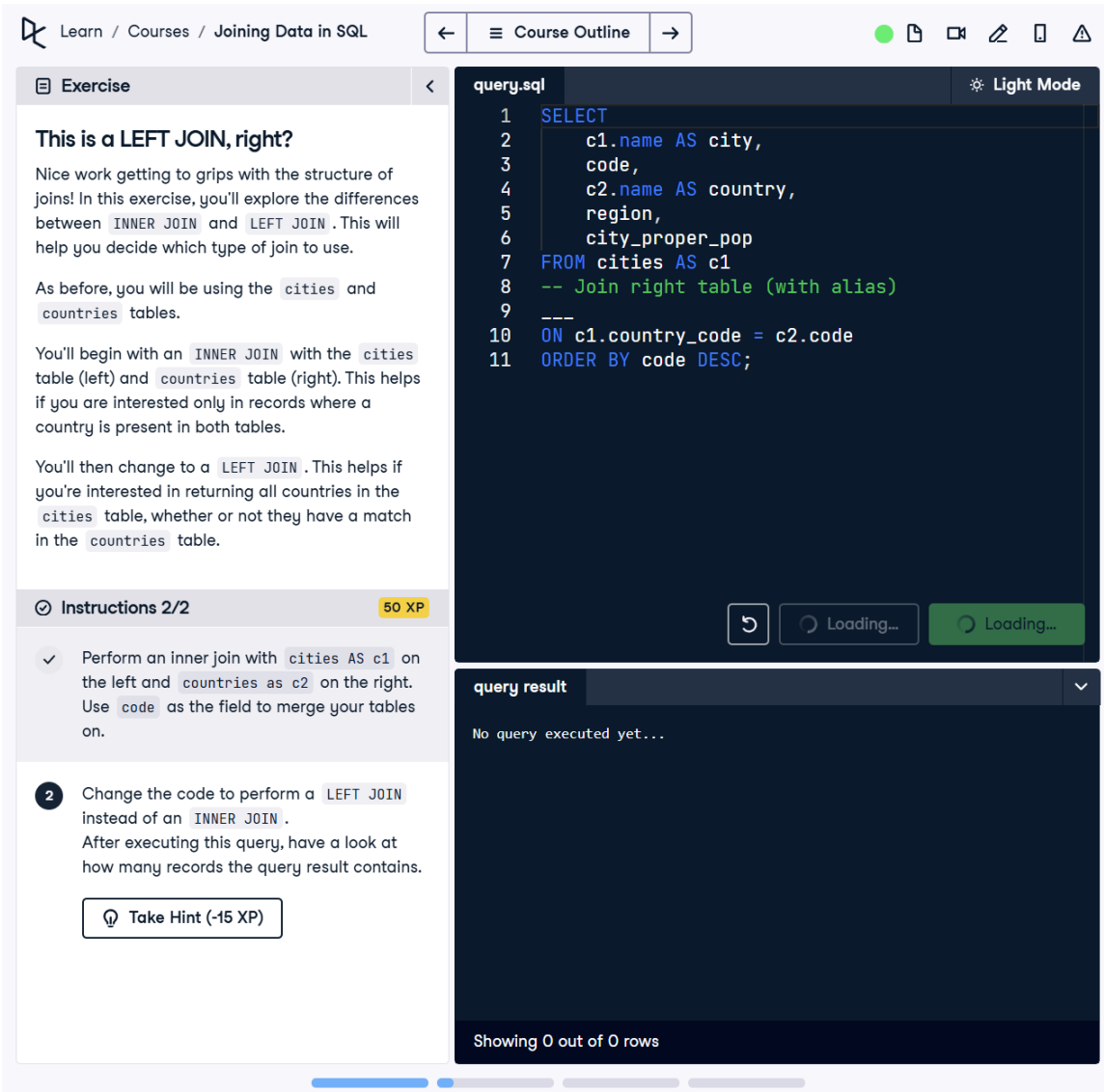
## LEFT JOIN Query Example

This task demonstrates the use of a LEFT JOIN to retrieve data from two tables: 'cities' and 'countries'. The query retrieves all records from the 'cities' table, even if there is no matching record in the 'countries' table. This is particularly useful when analyzing unmatched data.

Below is the instruction and query setup:




## -- SQL Query Using LEFT JOIN

```
SELECT
    c1.name AS city,
```

```
    code,
    c2.name AS country,
    region,
    city_proper_pop
FROM cities AS c1
-- Join right table (with alias)
LEFT JOIN countries AS c2
ON c1.country_code = c2.code
ORDER BY code DESC;
```

Explanation: This query uses a LEFT JOIN to include all rows from the 'cities' table ('c1'), even if there are no matching rows in the 'countries' table ('c2'). The SELECT statement retrieves:

1. 'c1.name' (aliased as 'city'): The name of the city.
2. 'code': The country code.
3. 'c2.name' (aliased as 'country'): The name of the country (null if unmatched).
4. 'region': The region of the country (null if unmatched).
5. 'city_proper_pop': The proper population of the city.

The results are sorted by the 'code' column in descending order.