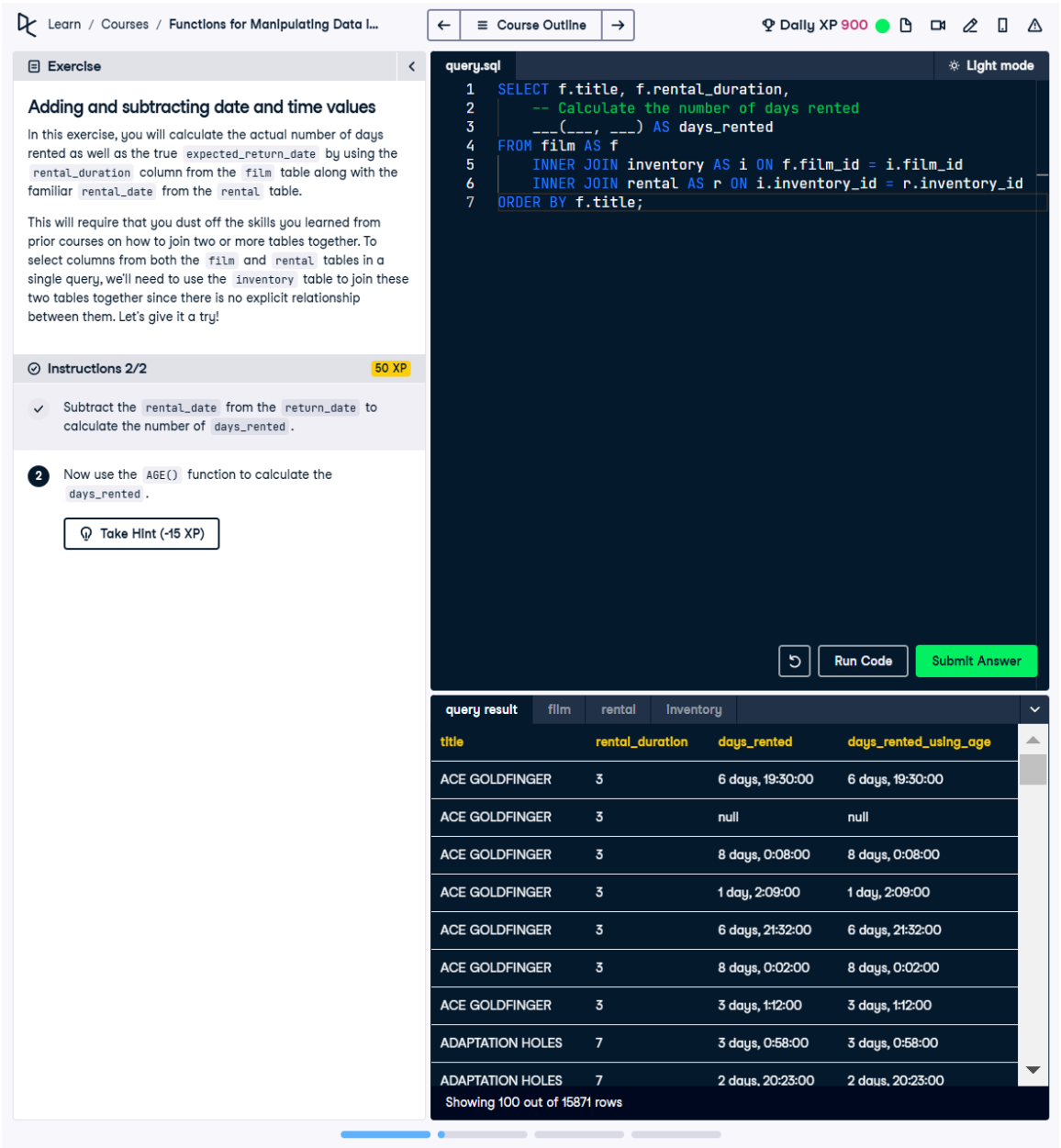
Adding and Subtracting Date and Time Values - Exercise (Updated)



Question:

1. Subtract the rental_date from the return_date to calculate the number of days rented.
2. Use the AGE() function to calculate the days_rented.

Answer:

```
-- Calculate the number of days rented
SELECT f.title, f.rental_duration,
  r.return_date - r.rental_date AS days_rented,
  AGE(r.return_date, r.rental_date) AS days_rented_using_age
FROM film AS f
INNER JOIN inventory AS i ON f.film_id = i.film_id
INNER JOIN rental AS r ON i.inventory_id = r.inventory_id
ORDER BY f.title;
```

Explanation:

1. SELECT f.title, f.rental_duration: Retrieves the film title and its rental duration.
2. r.return_date - r.rental_date AS days_rented: Calculates the difference between the return_date and rental_date to determine the number of days rented.
3. AGE(r.return_date, r.rental_date) AS days_rented_using_age: Uses the AGE() function to compute the interval between the return_date and rental_date, providing a detailed interval result.
4. INNER JOIN inventory AS i ON f.film_id = i.film_id: Joins the film and inventory tables using the film_id column.
5. INNER JOIN rental AS r ON i.inventory_id = r.inventory_id: Joins the inventory and rental tables using the inventory_id column.
6. ORDER BY f.title: Sorts the results alphabetically by the film title.

Query Results:

The query results display the following columns:
1. title: The title of the film.
2. rental_duration: The duration of the rental in days.
3. days_rented: The calculated number of days rented, obtained by subtracting rental_date from return_date.
4. days_rented_using_age: A similar calculation using the AGE() function, providing a more detailed interval format.

Example from the output:
- The film 'ACE GOLDFINGER' has a rental_duration of 3 days. Some rows show a days_rented of 6 days, 19:30:00, while others may have NULL values if the return_date is not available.