Objective: Implement and test a function for calculating the area of a rectangle.

Steps:

Write Test:

- Begin by writing a test case in your preferred testing framework (e.g., pytest, unittest) that defines the expected behavior of the function.
- Specify inputs and expected outputs for various scenarios, covering different rectangle dimensions.
- For example, consider a test case where the rectangle has a width of 5 units and a height of 3 units. The expected area in this case would be 15 square units.

Run Test:

- Execute the test case using the testing framework.
- Expect the test to fail initially since the function implementation is not yet available.

Write Code:

- Implement the function code to calculate the area of a rectangle based on the provided width and height.
- Ensure the function adheres to the requirements specified in the failing test case.
- For instance, define a function named `calculate_rectangle_area(width, height)` that returns the product of the width and height.

Run Test Again:

- Re-run the test case to validate the correctness of the function implementation.
- Expect the test to pass if the function correctly calculates the area of a rectangle according to the specified inputs.

Refactor (Optional):

- Refactor the function code as necessary to improve readability, performance, or maintainability.
- Ensure that all test cases continue to pass after refactoring, indicating that the function's behavior remains unchanged.