**Sauce Demo: - Login Page Automation Test Cases by Cypress.  
  
Documentation:**

**Test Suite:**  
describe('Testing Website', () => { ... }): Defines a test suite named "Testing Website" which contains multiple test cases.

**Setup:**  
beforeEach(() => { ... }): Runs before each test case to navigate to the Sauce Demo website.

**Test Cases:**

**Test Case 1: Login with Valid Credentials:**

**Steps to input valid username and password and verify successful login by checking the URL.**

**Test Case 2: Login with Invalid Credentials:**

**Steps to input invalid username and password and verify the error message.**

**Test Case 3: Add Product to Cart:**

**Steps to log in, add the product to the cart, and verify the product is added by checking the cart badge.**

**Test Case 4. Remove Product from Cart:**

**Steps to log in, add a product to the cart, navigate to the cart, remove the product, and verify the product is removed by checking the cart badge.**

**Test Case 5: Complete Checkout Process:**

**Steps to log in, add a product to the cart, navigate to the cart, proceed to checkout, fill out the checkout form, and verify the checkout is completed by checking the URL.**

**Notes:-**

**1. Tools and Frameworks Used**

**- \*Cypress\*: Chosen for its powerful and easy-to-use testing capabilities for web applications.**

**2. Test Cases Implemented**

* **\*Login Functionality\*: Verified that users can log in with valid credentials.**
* **\*Navigation Bar\*: Ensured all navigation links direct to the correct pages.**
* **\*Form Submission\*: Tested form submission with both valid and invalid inputs to ensure proper validation and error messages.**

**3. Challenges and Solutions**

**- \*Error Handling\*: Faced issues with asynchronous operations causing tests to fail intermittently. This was resolved by implementing proper wait strategies and retry logic.**

**- \*Coding Intricacies\*: Struggled with specific syntax and structure in Cypress. Resolved by consulting the official Cypress documentation and related tutorials.**

**- \*Data Inconsistencies\*: Managed test data through fixtures to ensure consistency across tests.**