Test Plan: StringUtils Class

* Test Objectives:
  + Validate the functionality of string operations methods (concatenate, reverse, upperCase, trim) in the StringUtils class.
  + Ensure that methods handle various input scenarios correctly, including edge cases and corner scenarios.
  + Verify that methods produce expected outputs based on input parameters.
* Test Scenarios:
  + Concatenate Method:
    - Test with non-empty strings.
    - Test with empty strings.
    - Test with special characters.
  + Reverse Method:
    - Test with non-empty strings.
    - Test with empty strings.
    - Test with strings containing whitespace.
  + UpperCase Method:
    - Test with lowercase alphabets.
    - Test with uppercase alphabets.
    - Test with mixed cases.
    - Test with empty strings.
  + Trim Method:
    - Test with strings containing leading and trailing whitespace.
    - Test with strings containing only whitespace.
    - Test with strings containing no whitespace.
    - Test with empty strings.
* Test Data:
  + Non-empty strings: "Hello", "World", "12345"
  + Empty strings: ""
  + Alphanumeric strings: "abc123", "XYZ456"
  + Strings with whitespace: " hello ", "\n\t world", " \n \t"
* Test Execution:
  + Execute parameterized test cases using JUnit test runner.
  + Analyze test results to ensure all methods produce expected outputs.
  + Capture and log any failures encountered during test execution.