Test Cases Documentation for Module-Packet-Verification

Introduction

This document lists all the test cases used to validate the functionality of Module-Packet-Verification. It covers ***unit tests.***

Test Cases

Test Case ID	Description	Test Steps	Expected Result VS Actual Result	Status
TC-01	Test on valid input	Call validate_input(args), with the args being valid	Same	passed
TC-02	Test on zero or negative input	Call validate_input(args), with the args contains zeros and -ve	Same	passed
TC-03	Test on non-numeric input	Call validate_input(args), with args contains non-numeric	Same	passed
TC-04	Test on empty input	Call validate_input(args), with args being empty	Same	passed
TC-05	Test inputs with large numbers	Call validate_input(args), with args contains large numbers	Same	passed
TC-06	Test on mixed valid and invalid inputs	Call validate_input(args), with args contains mixed valid and invalid input	Same	passed
TC-07	Test on no args with calling convert_argv_to_int_arr()	Call convert_argv_to_int_arr(args)	Same	passed
TC-08	Test on single arg with calling convert_argv_to_int_arr()	Call convert_argv_to_int_arr(args)	Diff	fail
TC-09	Test on multiple args convert_argv_to_int_arr()	Call convert_argv_to_int_arr(args)	Diff	fail
TC-10	Test on negative value args with calling convert_argv_to_int_arr()	Call convert_argv_to_int_arr(args)	Diff	fail
TC-11	Test on zero value args with calling convert_argv_to_int_arr()	Call convert_argv_to_int_arr(args)	Diff	fail
TC-12	Test on first and last modules calling first_last_modules(), using regular array	Call first_last_modules(modules)	Same	passed

TC-13	Test on first and last modules calling first_last_modules(), using single element array	Call first_last_modules(modules)	Same	passed
TC-14	Test on first and last modules calling first_last_modules(), using all same elements array	Call first_last_modules(modules)	Same	passed
TC-15	Test Last module before first module	Setup modules to make last module before first module, then call assign_valid_invalid(modules)	Same	passed
TC-16	Test same module being provided	Setup modules all the same value, then call assign_valid_invalid(modules)	Same	Passed

Summary of Unit Test Cases

- **Total Number of Unit Test Cases:** 17
- **Number of Passed Test Cases:** 13
- **Number of Failed Test Cases:** 4

Appendix

- **Test Environment:** Ubuntu 20.04
- **Test Data:** Differs from test to another, but in general List of some integers
- **Tools: gtest**