

TEST PATH:

There are total of 53 test cases that are tested for all methods in the source code (Printtokens.java). In order to execute all test paths, ten java test files were created. Junit was implemented for executing the generated test cases. Refer to the CFG document to see the achieved edge coverages and specific test paths for individual methods and End-To-End/System-Level program. Refer to Jacoco reports to see the test coverage analysis. Refer to Fault detection and correction document to reference specific outputs for the test paths.

TEST DATA, and Expected Output:

Here are the following 10 java test files that are used to run the total of 53 test paths.

Java file name/test type	Test data (each data is each test path)	Junit Assert Class	Expected Output
CommentParameterTest.java /Parameter Test	{";hello"}, {";Cat"}, {";Can"}, {";You"}, {";Dance"},	AssertTrue()	True

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
KeywordParameterTest.java /Parameter Test	{"lambda"}, {"and"}, {"or"}, {"if"}, {"xor"}, {"lambda"}	AssertTrue()	True

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
SuiteTestExecution.java /Suite Test	NA	NA	Execute all Test paths instantaneously.

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
charparameterTest.java /Parameter Test	{"#e"}, {"#g"}, {"#z"}, {"#j"},	AssertTrue()	True

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
handletokenTest.java /Boolean Test	Fname = "tokens.txt" (7 test paths total)	assertNotNull() assertNotEqual()	Not NULL Not Equal

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
identifierParameterTest.java /Parameter Test	{"a"}, {"ab"}, {"ac"}, {"lay"}	assertTrue()	True

Java file name/test type	Test data (each data is each test run)	Junit Assert Class	Expected Output
runParameterTest.java /Parameter Test	{"0"}, {"02"}, {"987"}, {"4567"},	assertTrue()	True

