

Effectiveness of Different Test Case Prioritization Methods Based on Coverage Criteria

1. Experimental Results

Benchmark	Coverage Criteria	Prioritization Method	# testcases	# faults exposed
printtokens	Statement	Random	14	2
		Total	6	6
		Additional	5	4
	Branch	Random	17	4
		Total	7	5
		Additional	6	4
printtokens2	Statement	Random	13	6
		Total	4	7
		Additional	4	6
	Branch	Random	11	6
		Total	6	8
		Additional	4	7
replace	Statement	Random	18	15
		Total	13	10
		Additional	9	4
	Branch	Random	24	14
		Total	21	19
		Additional	11	13
schedule	Statement	Random	5	1
		Total	3	2
		Additional	3	4
	Branch	Random	11	6
		Total	8	3
		Additional	7	5
schedule2	Statement	Random	6	2
		Total	1	3
		Additional	1	3
	Branch	Random	11	7
		Total	7	5
		Additional	5	2
tcas	Statement	Random	5	3
		Total	4	10
		Additional	4	10
	Branch	Random	12	6
		Total	13	13
		Additional	11	13

totinfo	Statement	Random	7	14
		Total	5	12
		Additional	5	12
	Branch	Random	7	13
		Total	5	13
		Additional	5	13