

Table 1: Results of Z3-PFA, CVC4, Z3, and Z3-str3 on Basic String Constraint benchmarks.

		Z3-PFA	CVC4	Z3	Z3-str3
PyEx	SAT	19468	19763	16528	3030
	UNSAT	3854	3834	3831	3816
	UNKNOWN	0	0	0	7
	TIMEOUT	2099	0	5062	16594
	ERROR	0	1824	0	18548
	×	0	-	0	20
APLAS	SAT	135	205	12	37
	UNSAT	291	221	100	111
	UNKNOWN	0	0	0	338
	TIMEOUT	122	174	488	94
	ERROR	0	0	0	20
	×	52	-	0	0
LeetCode	SAT	841	859	881	670
	UNSAT	1784	1785	1785	1780
	UNKNOWN	0	0	0	125
	TIMEOUT	0	22	0	83
	ERROR	0	0	0	8
	×	41	-	0	0
StringFuzz	SAT	528	671	264	491
	UNSAT	320	240	186	192
	UNKNOWN	0	0	0	4
	TIMEOUT	216	69	615	377
	ERROR	1	85	0	1
	×	0	-	0	0
cvc4 _{pred}	SAT	10	11	12	8
	UNSAT	818	818	808	772
	UNKNOWN	0	0	0	5
	TIMEOUT	2	6	15	41
	ERROR	0	0	0	9
	×	5	-	0	0
cvc4 _{term}	SAT	13	8	5	5
	UNSAT	1031	936	1021	958
	UNKNOWN	0	0	0	2
	TIMEOUT	1	12	19	57
	ERROR	0	89	0	11
	×	0	-	0	12
Total	SAT	21002	21517	17702	4253
	UNSAT	8097	7834	7731	7649
	UNKNOWN	0	0	0	481
	TIMEOUT	2440	283	6199	17246
	ERROR	1	1998	0	49
	×	98	-	0	32

Table 2: Results of Z3-PFA, CVC4, Z3, and Z3-str3 on String-Number Conversion benchmark.

		Z3-PFA	CVC4	Z3	Z3-str3
Leetcode	SAT	2347	1543	1892	216
	UNSAT	16368	15676	16105	15329
	UNKNOWN	0	0	0	590
	TIMEOUT	210	1708	930	2462
	ERROR	0	0	0	284
	×	2	-	0	46
PythonLib	SAT	886	408	797	201
	UNSAT	720	660	724	642
	UNKNOWN	0	0	0	45
	TIMEOUT	1040	1578	1125	1713
	ERROR	0	0	0	43
	×	0	-	0	2
JavaScript	SAT	20	6	16	4
	UNSAT	0	0	0	0
	TIMEOUT	0	14	4	16
Total	SAT	3253	1957	2705	421
	UNSAT	17088	16336	16829	15971
	UNKNOWN	0	0	0	635
	TIMEOUT	1250	3300	2059	4191
	ERROR	0	0	0	327
	×	2	-	0	48