

Table 1: Comparing PromiseTune with a variant that excludes casually purified rules (denoted as w/o Rules) using mean (standard deviation) of optimized performance over 30 runs.

System	$B = 100$		$B = 150$		$B = 200$	
	PromiseTune	w/o Rules	PromiseTune	w/o Rules	PromiseTune	w/o Rules
7z	4293.207 (40.522)	4456.813 (263.886)	4269.313 (43.412)	4405.520 (240.559)	4251.480 (37.055)	4321.780 (80.913)
DConvert	1.802 (0.020)	1.814 (0.024)	1.795 (0.013)	1.808 (0.020)	1.795 (0.013)	1.807 (0.020)
ExaStencils	4845.100 (243.121)	4873.913 (241.676)	4830.120 (245.468)	4839.173 (240.694)	4826.827 (245.611)	4813.073 (229.708)
BDB-C	0.355 (0.003)	0.356 (0.003)	0.354 (0.001)	0.355 (0.002)	0.354 (0.000)	0.354 (0.001)
DeepArch	1.047 (0.005)	1.048 (0.004)	1.046 (0.002)	1.046 (0.002)	1.045 (0.000)	1.046 (0.001)
PostgreSQL	50689.860 (28.115)	50697.353 (28.525)	50682.680 (22.001)	50690.393 (20.626)	50677.740 (16.709)	50683.553 (18.144)
JavaGC	407.500 (7.796)	411.967 (11.458)	405.700 (5.487)	409.267 (10.873)	404.367 (3.049)	406.383 (4.893)
Storm	1.000 (0.000)	0.999 (0.003)	1.000 (0.000)	1.000 (0.002)	1.000 (0.000)	1.000 (0.002)
x264	26.670 (1.634)	26.789 (1.651)	26.254 (1.573)	26.533 (1.531)	26.089 (1.356)	26.248 (1.454)
Redis	84682.146 (1546.136)	84348.184 (1498.053)	85119.462 (1614.212)	84845.434 (1646.513)	85437.554 (1573.519)	85278.694 (1532.202)
HSQldb	248.327 (0.203)	248.333 (0.196)	248.247 (0.112)	248.300 (0.184)	248.247 (0.112)	248.280 (0.176)
LLVM	199.683 (0.000)	199.770 (0.160)	199.683 (0.000)	199.683 (0.000)	199.683 (0.000)	199.683 (0.000)