Heaps and Data Structures: A Challenge for Automated Provers Experiment Rerun #0

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The tables below reflect a rerun of experiments with E 1.3 with -xAuto -tAuto. We also run the latest Z3.

Model	CVC3	E	Fx7	SPASS	Vampire	Yices	Z3	Z3$_{+p}$	Total
H[dot2(p,f)]	$2_{0.04}$	$10_{42.68}$	$2_{2.12}$	$5_{120.39}$	$20_{2.06}$	$2_{0.08}$	$4_{118.72}$	$33_{0.18}$	$210_{10.59}$
H[p][f]	$9_{42.14}$	$12_{58.71}$	$16_{47.59}$	$6_{43.63}$	$20_{12.00}$	$27_{9.18}$	$13_{4.45}$	$33_{0.08}$	$268_{13.40}$
H[dot(p,f)]	$12_{28.13}$	$10_{42.16}$	$24_{24.44}$	$9_{18.85}$	$20_{1.71}$	$31_{52.68}$	$27_{47.61}$	$33_{0.14}$	$298_{16.28}$
H[p,f]	$11_{3.34}$	$16_{27.32}$	$27_{22.71}$	$9_{56.17}$	$25_{6.53}$	$32_{3.81}$	$33_{1.19}$	$33_{0.08}$	$318_{7.26}$
H[f][p]	$9_{0.51}$	$16_{5.10}$	$33_{9.87}$	$10_{24.47}$	$22_{2.12}$	$33_{1.16}$	$33_{0.52}$	$33_{0.06}$	$321_{2.71}$
F[p]	$18_{0.07}$	$33_{0.35}$	$33_{1.05}$	$23_{17.45}$	$33_{1.10}$	$33_{0.04}$	$33_{0.04}$	$33_{0.05}$	$371_{1.43}$
Total	$61_{12.45}$	$97_{21.48}$	$135_{17.23}$	$62_{35.24}$	$140_{4.01}$	$158_{12.93}$	$143_{13.12}$	$198_{0.10}$	$1786_{8.05}$

Table 3. Number of assertions solved and, in subscript, the average time of successful proofs in seconds for multi-list benchmarks $1/1^-$ and $2/2^-$. The timeout was set to 600s, and the tests run on 2.8GHz Windows 7 PC.

Model	CVC3$_{+p}$	E	Fx7	Fx7$_{+p}$	Vampire	Yices	Z3	Z3$_{+p}$	Z3$_{+p3}$	Total
H[dot2(p,f)]	$3_{37.68}$	0	0	$5_{80.41}$	0	0	0	$10_{6.21}$	$10_{2.10}$	$38_{16.51}$
H[p][f]	$2_{66.35}$	0	0	$7_{57.99}$	0	$1_{4.86}$	$2_{42.44}$	$9_{2.69}$	$9_{18.70}$	$39_{22.39}$
H[dot(p,f)]	$6_{141.17}$	0	$2_{164.66}$	$4_{20.54}$	0	$1_{70.83}$	$3_{50.60}$	$10_{3.87}$	$10_{1.38}$	$46_{33.78}$
H[p,f]	$3_{180.26}$	0	$2_{98.72}$	$7_{30.62}$	0	$2_{45.58}$	$5_{71.98}$	$8_{0.77}$	$10_{0.51}$	$47_{30.18}$
H[f][p]	$6_{103.95}$	0	$6_{186.54}$	$10_{19.12}$	0	$6_{27.80}$	$8_{109.26}$	$10_{0.37}$	$10_{0.17}$	$66_{45.18}$
F[p]	$7_{11.90}$	$2_{69.34}$	$10_{30.83}$	$10_{9.89}$	$3_{7.70}$	$10_{0.31}$	$10_{52.23}$	$10_{0.15}$	$10_{0.09}$	$82_{14.40}$
Total	$27_{86.69}$	$2_{69.34}$	$20_{97.71}$	$43_{32.43}$	$3_{7.70}$	$20_{16.84}$	$28_{71.18}$	$57_{2.39}$	$59_{3.57}$	$318_{27.16}$

Table 4. Number of benchmarks solved by different systems. Systems not mentioned in the table timeout on all benchmarks. Benchmarks: $1/1^-$, $1/10^-$, $2/2^-$, $2/10^-$, $3/3^-$, $1/1$, $1/10$, $2/2$, $2/10$, and $3/3$.