Benchmark Results

all times in µs

Benchmark:	n	C99 -O2 average	factor	C99 -O0 average	factor	LuaJIT 2.1 (default) average	factor	LuaJIT 2.0 -joff average	factor	Luau (default) average	factor	Luau -g0 O2 average	factor	Luau -g0 O2 codegen average	factor
DeltaBlue	12000/1	9.20	0.07	18	0.14	128	1.0	169	1.3	147	1.1	150	1.2	138	1.1
Richards	100/1	539	0.05	3'054	0.30	10'274	1.0	29'286	2.9	33'212	3.2	33'933	3.3	28'543	2.8
Json	100/1	409	0.15	723	0.27	2'718	1.0	7'123	2.6	8'166	3.0	7544	2.8	7235	2.7
Havlak	10/1	233'021	0.06	319'006	0.08	3'786'238	1.0	4'855'615	1.3	3'883'206	1.0	3'723'410	1.0	3'434'148	0.9
CD	250/2	466	0.09	698	0.13	5'234	1.0	7'338	1.4	6'201	1.2	5'868	1.1	4'952	0.9
Bounce	1500/1	16	0.18	45	0.51	88	1.0	491	5.6	601	6.8	551	6.3	345	3.9
List	1500/1	22	0.18	105	0.85	123	1.0	401	3.3	473	3.8	455	3.7	314	2.6
Mandelbrot	500/1	0.07	0.06	0.09	0.08	1.06	1.0	1.09	1.0	0.40	0.4	0.41	0.4	0.20	0.2
NBody	250000/1	0.19	0.08	1.22	0.52	2.33	1.0	5.49	2.4	5.13	2.2	5.25	2.2	2.57	1.1
Permute	1000/1	17	0.03	70	0.11	623	1.0	621	1.0	985	1.6	918	1.5	620	1.0
Queens	1000/1	10	0.08	45	0.37	123	1.0	476	3.9	621	5.0	631	5.1	358	2.9
Sieve	3000/1	10	0.22	40	0.87	46	1.0	227	4.9	313	6.8	274	6.0	136	3.0
Storage	1000/1	328	0.37	462	0.53	879	1.0	1'379	1.6	1'373	1.6	1'386	1.6	1'301	1.5
Towers	600/1	26	0.14	230	1.21	190	1.0	1'046	5.5	1'527	8.0	1'361	7.2	1'100	5.8
sum of averages:		234'873		324'497		3'806'667		4'904'179		3'936'831		3'776'487		3'479'193	
geomean of factors:			0.10		0.30		1.0		2.32		2.39		2.31		1.64
1/geomean:			9.80		3.30		1.00		0.43		0.42		0.43		0.61

Benchmarks used from https://github.com/rochus-keller/Are-we-fast-yet
Measurements conducted on 2025-10-25
Test machine: Lenovo T480, i5-8350U, 1.70GHz, 16 GB RAM, Debian Bookworm x86_64
All binaries compiled with GCC 12.2.0 x86_64

LuaJIT version 2.1, commit 25a61a1, downloaded from https://github.com/LuaJIT/LuaJIT/archive/refs/heads/v2.1.zip on 2025-10-25
Luau commit 5836a9c, downloaded from https://github.com/luau-lang/luau/archive/refs/heads/master.zip on 2025-10-25, make config=release