

### Are-we-fast-yet Benchmark Results

Benchmark:	all times in $\mu$ s	C++98 gcc -O2		LuaJIT 2.0		LuaJIT -joff		Lua 5.1.5		Lua 5.2.4		Lua 5.3.6		Lua 5.4.1		Lua 5.4.6	
		n	average	factor	average	factor	average	factor	average	factor	average	factor	average	factor	average	factor	average
DeltaBlue	12000/1	25	0.1	345	1.0	428	1.2	868	2.5	841	2.4	807	2.3	647	1.9	667	1.9
Richards	100/1	3'721	0.1	34'879	1.0	99'423	2.9	217'903	6.2	216'537	6.2	184'903	5.3	151'299	4.3	147'667	4.2
Json	100/1	3'975	0.6	6'611	1.0	19'822	3.0	45'554	6.9	44'369	6.7	41'393	6.3	32'835	5.0	33'649	5.1
Havlak	10/1	221'753	0.0	7'975'396	1.0	9'606'268	1.2	19'499'277	2.4	17'742'578	2.2	16'745'192	2.1	17'119'432	2.1	20'343'264	2.6
Bounce	1500/1	43	0.2	217	1.0	1'358	6.3	6'619	30.5	4'030	18.6	3'461	15.9	2'408	11.1	2'430	11.2
List	1500/1	76	0.1	599	1.0	931	1.6	3'048	5.1	2'347	3.9	2'074	3.5	1'639	2.7	3'315	5.5
Mandelbrot	500/1	1	0.5	2	1.0	1	0.5	3	1.5	3	1.5	4	2.0	2	1.0	5	2.5
NBody	250000/1	1	0.1	7	1.0	16	2.3	41	5.9	42	6.0	36	5.1	29	4.1	32	4.6
Permute	1000/1	120	0.4	292	1.0	1'680	5.8	10'921	37.4	5'904	20.2	4'546	15.6	3'597	12.3	6'703	23.0
Queens	1000/1	165	0.6	265	1.0	1'091	4.1	3'688	13.9	3'363	12.7	3'015	11.4	2'100	7.9	2'225	8.4
Sieve	3000/1	30	0.3	103	1.0	490	4.8	1'356	13.2	1'360	13.2	1'249	12.1	850	8.3	1'050	10.2
Storage	1000/1	741	0.3	2'144	1.0	3'328	1.6	7'743	3.6	7'027	3.3	6'853	3.2	5'876	2.7	6'047	2.8
Towers	600/1	159	0.5	299	1.0	2'933	9.8	17'372	58.1	9'626	32.2	7'571	25.3	5'740	19.2	13'606	45.5
sum of averages:		230'810	0.03	8'021'159	1.0	9'737'769	1.2	19'814'393	2.5	18'038'027	2.2	17'001'104	2.1	17'326'454	2.2	20'560'660	2.6
geomean of factors:			0.2		1.0		2.6		8.0		6.7		6.1		4.6		6.2
1/geomean:			4.50		1.00		0.39		0.13		0.15		0.16		0.22		0.16

Benchmarks used from <https://github.com/smarr/are-we-fast-yet> commit 770c664 3.4.2020

NOTE: CD didn't work on most of the Lua VMs, thus left out  
and <https://github.com/rochus-keller/Are-we-fast-yet>

Measurements done 2020-10-12 (LuaJIT, 5.2.4-5.4.1), June 2023 (C++98) and June 24 (Lua 5.1.5+bit.c)

Testmachine: HP EliteBook 2530p, Intel Core Duo L9400 1.86GHz, 4GB RAM, Linux i386

All binaries compiled with GCC 4.8.2

LuaJIT params, deviations from default values:

maxtrace	100000
maxrecord	40000
maxside	100
maxsnap	1000
sizemcode	64
maxmcode	5120