

Execution time complexity testing

Table 1. Parser combinator time complexity testing: all data calculated in microseconds (ms).

number of statements	1	2	4	8	16	32
mean time, ms	714	668	748	953	1433	2259
standard deviation, ms	243	243	297	370	577	872
95% confidence interval, ms	[597, 832]	[550, 786]	[605, 891]	[774, 1131]	[1154, 1712]	[1838, 2679]

Table 2. Parser combinator time complexity testing: all data calculated in microseconds (ms).

number of statements	64	128	256	512	1024	2048
mean time, ms	3554	6310	12176	23754	46762	94271
standard deviation, ms	773	1243	2407	4606	9082	18815
95% confidence interval, ms	[3169, 3931]	[5674, 6924]	[10947, 13363]	[21384, 26034]	[42091, 51256]	[84697, 103535]

Table 3. Parser combinator time complexity testing: all data calculated in microseconds (ms).

number of statements	4096	8192	16384	32768	65536	131072
mean time, ms	185230	373745	732819	1487193	3000317	5992934
standard deviation, ms	36032	73246	137660	293869	573482	1143464
95% confidence interval, ms	[166714, 203055]	[336224, 409927]	[660610, 801585]	[1337135, 1632138]	[2703077, 3285179]	[5399674, 6561188]

Table 4. Parser generator time complexity testing: all data calculated in microseconds (ms).

number of statements	1	2	4	8	16	32
mean time, ms	579	326	357	497	800	1413
standard deviation, ms	108	90	137	216	351	613
95% confidence interval, ms	[522, 634]	[281, 369]	[290, 423]	[392, 601]	[630, 969]	[1117, 1709]

Table 5. Parser generator time complexity testing: all data calculated in microseconds (ms).

number of statements	64	128	256	512	1024	2048
mean time, ms	2441	4478	8567	17396	36132	80709
standard deviation, ms	793	948	1710	3513	6992	15788
confidence interval, ms	[2057, 2824]	[4003, 4942]	[7696, 9409]	[15615, 19123]	[32531, 39595]	[72615, 88511]

Table 6. Parser generator time complexity testing: all data calculated in microseconds (ms).

number of statements	4096	8192	16384	32768	65536	131072
mean time, ms	190236	499182	1570007	5947809	34227177	181861883
standard deviation, ms	37169	96816	308310	1161353	6648763	34378450
95% confidence interval, ms	[171172, 208607]	[449365, 547107]	[1412198, 1722245]	[5351985, 6521896]	[30808483, 37517294]	[163919711, 198994363]

RAM usage testing

Table 7. RAM usage testing: amount of used memory expressed in Mebibytes (MiB).

number of statements	1	2	4	8	16	32
parser combinator, MiB	15,210938	15,171875	15,144531	15,175781	15,328125	15,292969
parser generator, MiB	15,148438	15,097656	15,191406	15,207031	15,289062	15,167969

Table 8. RAM usage testing: amount of used memory expressed in Mebibytes (MiB).

number of statements	64	128	256	512	1024	2048
parser combinator, MiB	15,105469	17,015625	15,171875	16,789062	17,292969	17,222656
parser generator, MiB	15,09375	15,230469	15,179688	15,273438	15,136719	16,984375

Table 9. RAM usage testing: amount of used memory expressed in Mebibytes (MiB).

number of statements	4096	8192	16384	32768	65536	131072
parser combinator, MiB	16,9375	17,324219	17,957031	19,398438	21,667969	26,710938
parser generator, MiB	17,753906	18,644531	20,902344	25,226562	33,78125	52,085938