

Benchmarks

Optimizations ARE enabled for each one. Zig – using ReleaseSafe, C – Immeasurable, left neutral, D – using whatever –O2 is for the Digital Mars D Compiler.

For the similar inputs given, *SimpleINI3* outperformed each implementation in time ran and memory consumption. This is not considering the copying of the arguments using `argsAlloc()` function to maintain portability, nor the different optimization options that zig provides, it was simply ran with `-ReleaseFast` (which should be the equivalent of `-O2` in gcc.) The runtime of *INI5* and *SimpleINI3* were largely the same, except for *INI5* being limited by the disk I/O from reading a file, while *SimpleINI3* was largely copied directly into the source code.

The only programs which provided usable and realistic outputs for the given input were *SimpleINI2* and *INI5*.

Program	Time (Avg. Of 5 runs)	Memory Consumption
SimpleINI (C)	1.98ms	Unmeasurable (page fault)
SimpleINI2 (D)	11.402ms	1,584 allocs, 1,580 frees, 2,298,275 bytes allocated
SimpleINI3 (C)	0.73ms	51 allocs, 51 frees, 3,869 bytes allocated
INI5 (Zig)	1.32ms	4 allocs, 4 frees, 10,447 bytes allocated

