

Sheet1

Benchmark	Time (s)	Instructions	Rel to start	Rel to prev	Improvement
midmark	8.266 29 * 10 ⁹		1	1	Initial state
sandmark	205.984		1	1	
advent	72.184		1	1	
midmark	5.579		0.674933462	0.674933462	Compiled with optimization O1
sandmark	139.392		0.676712754	0.676712754	turned on.
advent	48.933		0.677892608	0.677892608	
midmark	5.67		0.685942415	1.016	Compiled with optimization O2
sandmark	141.298		0.6859659	1.014	turned on.
advent	49.308		0.683087665	1.008	
midmark	4.031 15 * 10 ⁹		0.487660295	0.711	Was using pointers to structs,
sandmark	100.591		0.488343755	0.712	now pass structs by value
advent	35.47		0.491383132	0.719	
midmark	3.625 13 * 10 ⁹		0.438543431	0.899	Stopped dereferencing pointers
sandmark	89.217		0.433125874	0.887	during memory operations and
advent	28.948		0.401030699	0.816	moved operations into the run_um module
midmark	2.229 11 * 10 ⁹		0.269658843	0.615	Seq_get was being called twice
sandmark	56.994		0.276691394	0.638824439	for every instruction word. Now
advent	17.39		0.240912113	0.600732348	it is called once per new zero segment and then once per word
midmark	2.078		0.251391241	0.932256617	Altered Program Loading to only
sandmark	54.827		0.266171159	0.961978454	call seg_get when necessary.
advent	16.616		0.230189516	0.955491662	Reworked loading the first zero segment. Inlined seg_get and put.
midmark	1.77 7 * 10 ⁹		0.214130172	0.851780558	Altered baseline design: memory
sandmark	45.67		0.22171625	0.832983749	was represented as a Hanson Seq
advent	13.783		0.190942591	0.829501685	of Hanson Seq's ... now a Hanson Seq of Hanson Array's