

Benchmark	Time	Instructions	Rel to start	Rel to prev	Improvement
Midmark	8.50 seconds	31,791,988,727	1.0	1.0	None (starting point)
Advent	69.18 seconds	-	1.0	1.0	
Sandmark	199.84 seconds	-	1.0	1.0	
Midmark	3.57 seconds	20,388,328,137	0.42	0.42	Compiled with -O1
Advent	29.58 seconds	-	0.428	0.428	
Sandmark	79.28 seconds	-	0.396	0.396	
Midmark	4.27 seconds	20,899,285,466	0.502	1.19	Compiled with -O2
Advent	34.93 seconds	-	0.505	1.18	
Sandmark	93.21 seconds	-	0.466	1.176	
Midmark	2.32 seconds	7,598,848,005	0.273	0.543	Removed Bitpack_getu, replaced with left and right shifts in execute.c
Advent	21.56 seconds	-	0.312	0.617	
Sandmark	58.12 seconds	-	0.291	0.624	
Midmark	1.40 seconds	4,632,093,100	0.165	0.603	Instead of loading m[0] each loop, now it only loads when it has been changed to a new segment.
Advent	11.94 seconds	32,928,655,986	0.173	0.554	
Sandmark	35.32 seconds	-	0.177	0.608	
Midmark	0.9 seconds	4,532,102,048	0.106	0.643	The load_program instruction now only calls the load_program function if registers[b] != 0. If it is 0, it just jumps to registers[c] in the current program.
Advent	8.29 seconds	31,449,796,746	0.119	0.694	
Sandmark	22.51 seconds	111,990,430,139	0.113	0.637	
Midmark	0.84 seconds	4,428,153,030	0.098	0.933	Made the instruction functions inline.
Advent	7.51 seconds	30,012,340,214	0.108	0.906	
Sandmark	21.19 seconds	109,408,482,342	0.106	0.941	
Midmark	0.80 seconds	4,419,210,361	0.094	0.952	Removed Bitpack_newu calls, replaced with left and right shifts in load.c
Advent	6.86 seconds	29,919,584,145	0.099	0.913	
Sandmark	20.27 seconds	109,405,090,306	0.101	0.956	
Midmark	0.76 seconds	3,962,868,477	0.089	0.951	Removed unnecessary

Advent	6.27 seconds	26,088,947,165	0.091	0.913	calls to Seq_get in the segmented_load function when registers[b] == 0.
Sandmark	19.28 seconds	98,019,426,348	0.096	0.951	
Midmark	0.75 seconds	3,588,359,785	0.088	0.937	Removed unnecessary calls to Seq_get in the segmented_store function when registers[a] == 0.
Advent	6.11 seconds	23,794,173,431	0.088	0.891	
Sandmark	18.84 seconds	88,696,364,247	0.094	0.977	