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Comp 40 - Spring 2018
Homework 7

Benchmark	Time	Instructions	Rel to start	Rel to prev	Improvement
Midmark	5.72	42.20 x 10^9	1.00	1.00	No improvement (starting point)
Sandmark	141.24	-	1.00	1.00	
Advent	50.01	-	1.00	1.00	
Midmark	5.39	39.57 x 10^9	0.942	0.942	Compiled with optimization turned on and linked against -lcii-O1. (We mistakenly optimized the code we were linking to, rather than our own code)
Sandmark	133.89	-	0.948	0.948	
Advent	47.78	-	0.955	0.955	
Midmark	5.39	39.57 x 10^9	0.942	1	Compiled with optimization turned on and linked against -lcii-O2. (We mistakenly optimized the code we were linking to, rather than our own code)
Sandmark	133.73	-	0.947	0.999	
Advent	47.84	-	0.957	1.001	
Midmark	5.38	39.12 x 10^9	0.941	0.998	Removed unnecessary calls of Bitpack_getu();
Sandmark	133.62	-	0.946	0.999	
Advent	47.74	-	0.955	0.998	
Midmark	3.79	34.04 x 10^9	0.663	0.704	Removed Hanson's Seq and replaced them with c-arrays
Sandmark	94.15	-	0.666	0.707	
Advent	35.11	-	0.702	0.735	
Midmark	3.79	33.63 x 10^9	0.663	1	Inlined get_segment function. Not done because of incorrect optimization.
Sandmark	91.73	-	0.649	0.974	
Advent	34.86	-	0.697	0.993	

Midmark	3.75	33.63 x 10^9	0.656	0.989	Inlined bitpack_getu function. Not done because of incorrect optimization.
Sandmark	92.09	-		1.003	
Advent	-	-	-	-	
Midmark	0.55	4.51 x 10^9	0.096	0.145	Compiled with optimization turned on and linked against -lcii-O2 as a result, all inlines happened at this step.
Sandmark	13.52	-	0.096	0.147	
Advent	5.41	-	0.108	0.155	
Midmark	0.45	4.12 x 10^9	0.079	0.818	Inlined get_word function
Sandmark	10.95	-	0.078	0.810	
Advent	4.32	-	0.086	0.799	
Midmark	0.37	3.70 x 10^9	0.065	0.822	Inlined get_size function
Sandmark	8.62	-	0.061	0.788	
Advent	2.92	-	0.058	0.676	
Midmark	0.33	3.42 x 10^9	0.058	0.892	Inlined load_segment, load_value and store_segment functions
Sandmark	8.35	-	0.059	0.969	
Advent	2.69	-	0.054	0.921	