

Aalto 2023

Contest

Task		Rank	Time	Instr. × 10 ⁹	Cycles × 10 ⁹	GHz	Threads	Lines of code	Nickname
Pre0	✓	1	0.000315	0.000254	0.00113	3.66	0.98	57	kqlski
	✓	2	0.000334	0.00225	0.00087	2.67	0.98	38	rv
	✓	3	0.000370	0.00070	0.00097	2.67	0.98	37	hltk
	✓	10	0.00051	0.00201	0.00134	2.68	0.99	37	
CP1	✓	1	3.04	14.3	13.5	4.46	1.00	98	pakettiale
	✓	2	3.44	26.2	15.4	4.47	1.00	54	npc-1
	✓	3	3.76	26.4	16.8	4.47	1.00	115	v_adder
	✓	10	7.12	56.3	31.9	4.48	1.00	28	
CP2a	✓	1	2.11	24.4	9.42	4.46	1.00	87	deepen9616
	✓	2	2.14	26.2	9.60	4.48	1.00	78	Waldo
	✓	3	2.16	24.3	9.67	4.48	1.00	63	tuomas
	✓	10	2.91	39.8	13.0	4.48	1.00	57	
CP2b	✓	1	0.367	26.5	26.5	4.00	18.1	71	Tianxing
	✓	2	0.406	56.3	32.7	4.04	19.9	33	rv
	✓	3	0.409	48.2	32.8	4.04	19.9	117	vili2k
	✓	10	0.430	40.3	35.4	4.11	20.0	49	
CP2c	✓	1	1.42	3.67	4.93	3.47	1.00	236	Jaakko
	✓	2	1.61	8.23	6.38	3.97	1.00	88	vime
	✓	3	1.79	16.4	7.97	4.45	1.00	103	Tianxing
	✓	10	2.67	7.30	10.6	3.98	1.00	54	
CP3a	✓	1	1.18	88.5	74.2	3.26	19.2	137	UnoK
	✓	2	1.22	83.5	75.7	3.22	19.2	233	Juho
	✓	3	1.34	78.6	68.5	3.29	15.5	222	novice
	✓	10	2.01	98.2	96.9	3.34	14.5	318	
CP3b	✓	1	0.61	44.0	38.3	3.23	19.3	135	UnoK
	✓	2	0.64	48.7	39.9	3.23	19.3	221	Juho
	✓	3	0.70	42.1	40.9	3.29	17.8	683	nanohenry
	✓	10	0.95	50.3	51.4	3.27	16.5	160	
CP4	✓	1	0.0170	0.093	0.067	3.92	1.00	137	samuliohman
	✓	2	0.0177	0.0396	0.0292	1.65	1.00	134	novice
	✓	3	0.0470	0.429	0.204	4.34	1.00	115	Ville
	✓	10	0.094	0.87	0.405	4.32	1.00	86	
CP5	✓	1	0.209	1.53	0.82	3.94	1.00	214	hltk
	✓	2	0.210	1.54	0.83	3.94	1.00	185	heinonen
	✓	3	0.219	1.59	0.83	3.85	0.99	155	abzukka
	✓	10	0.241	1.88	0.96	3.98	1.00	211	
CP9a	✓	1	1.42	72.4	73.6	2.92	17.7	225	UnoK
	✓	2	1.97	83.1	139	3.74	18.9	234	KW
	✓	3	2.01	157	132	3.48	18.9	1466	Angel
IS4	✓	1	0.198	17.1	13.4	3.40	19.9	277	UnoK
	✓	2	0.244	19.1	16.2	3.37	19.7	359	abzukka
	✓	3	0.298	19.8	19.9	3.37	19.9	268	Erald
	✓	10	1.46	129	111	3.79	20.0	127	
IS6a	✓	1	0.269	22.8	17.6	3.28	19.9	247	UnoK
	✓	2	0.279	25.2	18.0	3.24	19.9	343	abzukka
	✓	3	0.372	36.9	24.1	3.26	19.9	241	Erald
	✓	10	0.75	41.4	49.6	3.33	20.0	204	
IS6b	✓	1	0.197	2.10	0.88	4.45	1.00	181	UnoK
	✓	2	0.219	2.33	0.97	4.45	1.00	229	abzukka
	✓	3	0.232	2.44	1.02	4.42	1.00	185	ssssssss
	✓	10	0.269	2.74	1.18	4.38	1.00	220	
IS9a	✓	1	0.085	3.54	3.34	2.49	15.7	373	ht
	✓	2	0.470	46.4	28.1	3.61	16.6	216	UnoK
MF1	✓	1	6.80	17.4	30.5	4.48	1.00	61	Maaria
	✓	2	6.82	16.9	30.6	4.48	1.00	44	hltk
	✓	3	6.85	17.7	30.7	4.48	1.00	45	Joy
	✓	10	6.94	19.0	31.1	4.48	1.00	55	
MF2	✓	1	0.477	18.3	40.6	4.26	20.0	56	Miki
	✓	2	0.477	19.4	40.6	4.26	20.0	38	jriks
	✓	3	0.480	18.5	40.7	4.26	19.9	32	asdfg
	✓	10	0.492	21.1	41.6	4.24	20.0	63	
MF9a	✓	1	0.79	100.0	64.4	4.18	19.5	215	Juho
	✓	2	0.82	52.2	60.2	3.71	19.8	147	UnoK
SO4	✓	1	0.428	16.4	21.3	3.67	13.5	117	Juho
	✓	2	0.446	15.6	27.3	3.81	16.1	230	Long
	✓	3	0.467	16.2	18.7	3.63	11.0	110	Miki
	✓	10	0.78	17.5	19.3	3.28	7.57	101	
SO5	✓	1	0.421	18.1	21.4	3.93	13.0	71	
	✓	2	0.436	22.0	21.6	3.93	12.6	71	zbyju
	✓	3	0.452	16.3	32.9	3.91	18.6	123	UnoK
	✓	10	0.487	18.8	23.3	3.91	12.2	45	
SO6	✓	1	0.57	4.21	2.25	4.05	0.97	106	UnoK
	✓	2	0.60	4.85	2.55	4.26	1.00	134	abzukka
	✓	3	0.63	5.21	2.72	4.31	1.00	134	ITu
	✓	10	2.02	15.3	8.05	3.98	1.00	78	

✓ = already graded

Contest points

All correct submissions to the following tasks take part in the contest and you can earn **extra points**! When the course closes, we will compare your solution with the fastest correct solution that we received this year. If your running time is close to the fastest running time, you will get extra points as follows:

Task	Running time	Current	Points
CP3a	≤ 1.20 × fastest	= 1.20 × 1.18 s = 1.42 s	1
	≤ 1.05 × fastest	= 1.05 × 1.18 s = 1.24 s	2
CP3b	≤ 1.20 × fastest	= 1.20 × 0.61 s = 0.74 s	1
	≤ 1.05 × fastest	= 1.05 × 0.61 s = 0.64 s	2
CP5	≤ 1.20 × fastest	= 1.20 × 0.209 s = 0.251 s	1
	≤ 1.05 × fastest	= 1.05 × 0.209 s = 0.219 s	2
IS4	≤ 1.20 × fastest	= 1.20 × 0.198 s = 0.238 s	1
	≤ 1.05 × fastest	= 1.05 × 0.198 s = 0.208 s	2
IS6a	≤ 1.20 × fastest	= 1.20 × 0.269 s = 0.323 s	1
	≤ 1.05 × fastest	= 1.05 × 0.269 s = 0.283 s	2
IS6b	≤ 1.20 × fastest	= 1.20 × 0.197 s = 0.236 s	1
	≤ 1.05 × fastest	= 1.05 × 0.197 s = 0.207 s	2
SO4	≤ 1.20 × fastest	= 1.20 × 0.428 s = 0.51 s	1
	≤ 1.10 × fastest	= 1.10 × 0.428 s = 0.470 s	2
SO5	≤ 1.20 × fastest	= 1.20 × 0.421 s = 0.51 s	1
	≤ 1.10 × fastest	= 1.10 × 0.421 s = 0.463 s	2
SO6	≤ 1.20 × fastest	= 1.20 × 0.57 s = 0.69 s	1
	≤ 1.05 × fastest	= 1.05 × 0.57 s = 0.60 s	2

Here "Current" is our current estimate of the threshold based on the submissions we have got, but please note that it will change over time as we receive and grade new solutions!

Contest rules

You do not need to do anything special to benefit from the contest points; they will be calculated automatically when the course closes.

Late submissions and resubmissions are fine! You can improve your solutions still during the last week of the course, and they are eligible for the extra points from the contest!

Only fully correct solutions count in the contest: you must have a successful submission.