## HW1. Sort (Text Input)

Deadline: 2021-10-3 23:59:59

generated at : 2022-1-15 03:05:02

									i										2022-1-13 03.03.02
id	check	I_refs	cpu_time	m_peak	lost	m.e.	gcc	i.f.	i.h.	lang	flt	maxrss	?	priority	diversity	func	p_score	score	submission_time
109550074	1.00	3.11 M	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	429	3.98 MB	0	1.543	0.15	1.000	82	93	10/3 23:01:22
109550098	1.00	3.32 M	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	417	3.94 MB	0	1.539	0.15	1.000	82	93	10/3 21:19:17
109550206	1.00	4.79 M	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	435	4.16 MB	0	1.495	0.15	1.000	79	92	10/3 01:45:48
109550178	1.00	77.74 <u>M</u>	10 ms	76.05 MB	0 B	0	0	0	0	срр	464	3.44 MB	0	1.274	2.22	1.000	68	89	10/3 23:11:34
109550133	1.00	102.94 <u>M</u>	40 ms	75.96 MB	976 B	0	0	0	0	срр	459	3.16 MB	0	1.261	2.22	1.000	67	89	10/1 15:23:59
110550023	1.00	88.67 <u>M</u>	30 ms	76.19 MB	0 B	0	0	0	0	срр	531	3.53 MB	0	1.256	2.22	1.000	67	89	10/1 20:26:51
109550026	1.00	150.78 <u>M</u>	30 ms	76.83 MB	0 B	0	0	0	0	срр	586	3.67 MB	0	1.213	2.22	1.000	64	88	9/23 15:48:38
0712211	1.00	150.72 <u>M</u>	40 ms	76.34 MB	120 KB	0	0	0	0	срр	559	3.48 MB	0	1.218	2.22	0.998	65	88	9/16 16:17:07
109550184	1.00	150.67 <u>M</u>	30 ms	76.31 MB	0 B	0	0	0	0	срр	687	3.54 MB	0	1.206	2.22	1.000	64	88	10/3 19:31:12
109550085	1.00	155.75 <u>M</u>	30 ms	76.31 MB	0 B	0	0	0	0	срр	683	3.54 MB	0	1.204	2.22	1.000	64	88	10/2 22:19:22
0813463	1.00	153.8 <u>M</u>	40 ms	76.81 MB	0 B	0	0	0	0	срр	651	4.13 MB	0	1.199	2.22	1.000	64	88	9/21 17:17:14
610001005	1.00	171.72 <u>M</u>	50 ms	79.36 MB	0 B	0	0	0	0	срр	705	3.76 MB	0	1.193	2.22	1.000	63	88	9/27 17:07:28
309555005	1.00	65.26 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	411	3.95 MB	0	1.286	0.15	1.000	68	87	9/20 21:17:39
109550096	1.00	66.14 <u>M</u>	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	428	4.13 MB	0	1.280	0.15	1.000	68	87	10/1 11:47:33
109550018	1.00	75.81 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	426	4 MB	0	1.272	0.15	1.000	68	87	9/28 11:13:19
109550050	1.00	75.74 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	425	4.04 MB	0	1.272	0.15	1.000	68	87	9/29 03:18:57

109550146	1.00	76.07 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	422	4.07 MB	0	1.271	0.15	1.000	68	87	9/18 20:37:38
109550056	1.00	75.79 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	426	4.06 MB	0	1.271	0.15	1.000	68	87	10/1 02:12:27
309552002	1.00	75.9 M	20 ms	80.73 MB	0 B	0	0	0	0	cpp_shm	426	4.13 MB	0	1.270	0.15	1.000	68	87	10/3 09:09:11
109550022	1.00	75.79 <u>M</u>	20 ms	80.73 MB	0 B	0	0	0	0	cpp_shm	430	4.13 MB	0	1.270	0.15	1.000	67	87	9/30 15:48:50
109550138	1.00	76.63 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	427	4.13 MB	0	1.269	0.15	1.000	67	87	10/3 00:41:43
109550086	1.00	75.74 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	432	4.14 MB	0	1.269	0.15	1.000	67	87	9/30 22:48:13
109550134	1.00	75.85 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	431	4.15 MB	0	1.269	0.15	1.000	67	87	10/2 17:50:21
109550182	1.00	75.81 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	433	4.13 MB	0	1.269	0.15	1.000	67	87	9/28 18:01:05
109550046	1.00	75.7 M	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	425	4.29 MB	0	1.268	0.15	1.000	67	87	10/1 02:28:17
0816138	1.00	75.81 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	427	4.27 MB	0	1.268	0.15	1.000	67	87	9/28 12:16:55
109550070	1.00	75.74 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	430	4.29 MB	0	1.267	0.15	1.000	67	87	9/29 16:29:27
109550053	1.00	76.63 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	434	4.28 MB	0	1.266	0.15	1.000	67	87	9/20 21:37:01
109550158	1.00	82.96 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	428	4.08 MB	0	1.264	0.15	1.000	67	87	9/22 22:18:52
109550128	1.00	82.68 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	428	4.14 MB	0	1.264	0.15	1.000	67	87	9/18 21:34:20
109550132	1.00	77.17 <u>M</u>	30 ms	80.8 MB	0 B	0	0	0	0	cpp_shm	447	4.35 MB	0	1.263	0.15	1.000	67	87	10/3 02:45:27
109652017	1.00	77.79 <u>M</u>	20 ms	80.93 MB	0 B	0	0	0	0	cpp_shm	464	4.27 MB	0	1.261	0.15	1.000	67	87	10/1 21:53:30
109652042	1.00	77.79 <u>M</u>	20 ms	80.93 MB	0 B	0	0	0	0	cpp_shm	459	4.32 MB	0	1.261	0.15	1.000	67	87	9/22 10:44:56
0811619	1.00	77.57 <u>M</u>	20 ms	80.93 MB	0 B	0	0	0	0	cpp_shm	465	4.33 MB	0	1.261	0.15	1.000	67	87	9/28 00:14:04
109550162	1.00	76.18 <u>M</u>	20 ms	80.81 MB	120 KB	0	0	0	0	cpp_shm	435	4.29 MB	0	1.266	0.15	0.999	67	87	9/22 00:11:50

109550054	1.00	89.37 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	422	4.06 MB	0	1.260	0.15	1.000	67	87	9/28 16:17:32
109550090	1.00	89.93 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	419	4.09 MB	0	1.260	0.15	1.000	67	87	9/30 20:02:10
109550082	1.00	89.84 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	427	4.08 MB	0	1.259	0.15	1.000	67	87	9/27 18:04:13
109550150	1.00	85.89 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	431	4.27 MB	0	1.259	0.15	1.000	67	87	9/23 10:53:48
109550002	1.00	89.84 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	432	4.27 MB	0	1.256	0.15	1.000	67	87	9/28 14:07:28
0713339	1.00	92.72 <u>M</u>	20 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	430	4.15 MB	0	1.255	0.15	1.000	67	87	10/3 16:36:52
109550006	1.00	90.71 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	430	4.27 MB	0	1.255	0.15	1.000	67	87	9/30 11:03:32
109652053	1.00	78.39 <u>M</u>	30 ms	80.99 MB	0 B	0	0	0	0	cpp_shm	537	4.11 MB	0	1.254	0.15	1.000	67	87	9/28 21:12:13
109550124	1.00	75.78 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	525	4.39 MB	0	1.254	0.15	1.000	67	87	9/23 22:59:08
109550094	1.00	89.99 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	450	4.2 MB	0	1.254	0.15	1.000	67	87	10/3 20:41:27
109550068	1.00	86.97 <u>M</u>	30 ms	80.93 MB	0 B	0	0	0	0	cpp_shm	461	4.27 MB	0	1.254	0.15	1.000	67	87	9/18 22:35:37
109550088	1.00	87.43 <u>M</u>	30 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	462	4.23 MB	0	1.254	0.15	1.000	67	87	9/17 18:02:45
0812102	1.00	75.92 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	528	4.39 MB	0	1.254	0.15	1.000	67	87	9/29 16:29:44
109550164	1.00	78.28 <u>M</u>	30 ms	80.99 MB	0 B	0	0	0	0	cpp_shm	537	4.17 MB	0	1.254	0.15	1.000	67	87	9/23 20:53:53
109700045	1.00	78.39 <u>M</u>	20 ms	80.99 MB	0 B	0	0	0	0	cpp_shm	535	4.2 MB	0	1.254	0.15	1.000	67	87	9/28 21:01:24
109550160	1.00	93.54 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	433	4.27 MB	0	1.253	0.15	1.000	67	87	9/21 20:32:51
109550106	1.00	77.36 <u>M</u>	20 ms	81.09 MB	0 B	0	0	0	0	cpp_shm	518	4.48 MB	0	1.252	0.15	1.000	67	87	10/1 12:48:28
109550100	1.00	77.14 <u>M</u>	20 ms	81.09 MB	0 B	0	0	0	0	cpp_shm	523	4.48 MB	0	1.252	0.15	1.000	67	87	9/27 19:23:52
109550058	1.00	75.78 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	533	4.51 MB	0	1.252	0.15	1.000	67	87	10/2 00:54:22

0711624	1.00	76.25 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	527	4.53 MB	0	1.252	0.15	1.000	67	87	10/3 11:01:28
109550118	1.00	66.25 <u>M</u>	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	602	4.7 MB	0	1.252	0.15	1.000	67	87	10/1 14:19:24
109550049	1.00	92.04 <u>M</u>	20 ms	80.93 MB	0 B	0	0	0	0	cpp_shm	459	4.19 MB	0	1.252	0.15	1.000	67	87	9/23 14:36:16
109550071	1.00	78.28 <u>M</u>	20 ms	80.99 MB	0 B	0	0	0	0	cpp_shm	544	4.28 MB	0	1.252	0.15	1.000	67	87	10/1 13:26:03
109550156	1.00	103.12 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	425	4 MB	0	1.251	0.15	1.000	66	87	9/20 21:21:33
109550130	1.00	75.7 M	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	527	4.66 MB	0	1.251	0.15	1.000	66	87	9/24 18:23:59
0717030	1.00	78.39 <u>M</u>	30 ms	81.48 MB	0 B	0	0	0	0	cpp_shm	550	4.39 MB	0	1.249	0.15	1.000	66	87	10/2 22:41:25
109652026	1.00	78.82 <u>M</u>	20 ms	81.35 MB	0 B	0	0	0	0	cpp_shm	573	4.26 MB	0	1.248	0.15	1.000	66	87	10/3 20:45:35
0712254	1.00	75.76 <u>M</u>	20 ms	81.42 MB	0 B	0	0	0	0	cpp_shm	604	4.24 MB	0	1.248	0.15	1.000	66	87	9/21 16:52:23
109550142	1.00	66.25 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	606	4.97 MB	0	1.248	0.15	1.000	66	87	9/29 20:26:54
109550066	1.00	80.48 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	529	4.52 MB	0	1.248	0.15	1.000	66	87	9/24 18:16:35
0516048	1.00	89.35 <u>M</u>	30 ms	80.98 MB	0 B	0	0	0	0	cpp_shm	530	4.1 MB	0	1.246	0.15	1.000	66	87	10/3 19:30:33
0811618	1.00	75.87 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	606	4.84 MB	0	1.240	0.15	1.000	66	87	10/3 15:48:53
109550020	1.00	75.8 M	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	604	4.95 MB	0	1.239	0.15	1.000	66	87	9/29 13:45:13
109550038	1.00	90.2 M	30 ms	81.41 MB	0 B	0	0	0	0	cpp_shm	522	4.66 MB	0	1.239	0.15	1.000	66	86	9/22 21:43:54
109550110	1.00	104.99 <u>M</u>	30 ms	80.9 MB	0 B	0	0	0	0	cpp_shm	477	4.32 MB	0	1.239	0.15	1.000	66	86	9/17 22:32:18
109550001	1.00	75.76 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	655	4.98 MB	0	1.234	0.15	1.000	66	86	10/3 02:35:08
0816003	1.00	114.7 <u>M</u>	30 ms	80.91 MB	0 B	0	0	0	0	cpp_shm	480	4.37 MB	0	1.232	0.15	1.000	65	86	10/3 18:34:40
109550168	1.00	111.38 <u>M</u>	30 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	530	4.27 MB	0	1.229	0.15	1.000	65	86	9/17 00:55:03

109550126	1.00	131.73 <u>M</u>	30 ms	80.92 MB	0 B	0	0	0	0	cpp_shm	476	4.04 MB	0	1.228	0.15	1.000	65	86	9/16 22:19:12
0816077	1.00	66.37 <u>M</u>	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	795	5.57 MB	0	1.226	0.15	1.000	65	86	9/30 02:21:02
109101012	1.00	132.01 <u>M</u>	30 ms	80.82 MB	0 B	0	0	0	0	cpp_shm	453	4.39 MB	0	1.226	0.15	1.000	65	86	10/3 19:57:13
109550174	1.00	137.28 <u>M</u>	30 ms	80.91 MB	0 B	0	0	0	0	cpp_shm	483	4.34 MB	0	1.220	0.15	1.000	65	86	9/21 23:38:00
0812236	1.00	136.73 <u>M</u>	40 ms	82.45 MB	0 B	0	0	0	0	cpp_shm	547	4.6 MB	0	1.210	0.15	1.000	64	86	10/1 01:18:15
109550154	1.00	189.08 <u>M</u>	40 ms	81 MB	0 B	0	0	0	0	cpp_shm	586	4.12 MB	0	1.192	0.15	1.000	63	85	9/30 14:38:29
109550016	1.00	190.57 <u>M</u>	40 ms	81.16 MB	0 B	0	0	0	0	cpp_shm	650	4.36 MB	0	1.183	0.15	1.000	63	85	9/22 21:32:04
109550044	1.00	179.84 <u>M</u>	40 ms	80.68 MB	0 B	0	0	0	0	cpp_shm	627	5.07 MB	0	1.180	0.15	1.000	63	85	9/26 21:13:06
M093638	1.00	497.53 <u>M</u>	70 ms	114.02 MB	0 B	0	0	0	0	python	4.21 K	11.58 MB	0	1.020	3.42	1.000	54	85	10/1 19:14:42
<u>baseline</u>	1.00	751.15 <u>M</u>	120 ms	113.92 MB	0 B	0	0	0	0	python	2.41 K	10.93 MB	0	1.000	3.42	1.000	53	85	9/16 12:25:54
109550076	1.00	<u>2 G</u>	310 ms	120.62 MB	0 B	0	0	0	0	python	3.41 K	16.06 MB	0	0.950	3.42	1.000	51	84	9/22 13:56:17
0817001	1.00	<u>8.2 G</u>	4 s	76.48 MB	0 B	0	0	0	0	срр	564	3.67 MB	0	1.001	2.22	1.000	53	84	9/29 01:18:11
610001007	1.00	4.03 G	480 ms	80.81 MB	0 B	0	0	0	0	cpp_shm	425	4.04 MB	0	1.043	0.15	1.000	55	82	10/2 02:09:02
0812249	1.00	75.74 <u>M</u>	20 ms	81.1 MB	453.19 KB	1	0	0	0	cpp_shm	522	4.64 MB	0	1.252	0.15	0.945	67	82	9/25 19:10:36
0816078	1.00	4.52 G	470 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	604	4.91 MB	0	1.011	0.15	1.000	54	82	9/26 03:08:29
0812116	1.00	<u>7 G</u>	1 s	233.25 MB	0 B	0	0	0	0	cpp_shm	527	4.41 MB	0	1.003	0.15	1.000	53	81	10/3 05:27:54
0717078	1.00	8.97 G	4 s	80.66 MB	0 B	0	0	0	0	cpp_shm	602	4.75 MB	0	0.983	0.15	1.000	52	81	9/21 16:35:26
0511258	1.00	17.39 <u>G</u>	5 s	80.79 MB	0 B	0	0	0	0	cpp_shm	441	4.07 MB	0	0.976	0.15	1.000	52	81	10/3 23:07:05
0816068	1.00	14.91 <u>G</u>	5 s	80.66 MB	0 B	0	0	0	0	cpp_shm	603	4.95 MB	0	0.960	0.15	1.000	51	81	9/30 16:26:39

0616317	1.00	7.98 G	4 s	80.66 MB	0 B	0	0	0	0	cpp_shm	607	5.02 MB	0	0	0.00	1.000	0	55	10/9 20:56:54
109550052	1.00	75.7 M	20 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	428	3.86 MB	0	0	0.00	1.000	0	55	10/15 23:20:43
0816079	1.00	106.45 <u>M</u>	30 ms	81.43 MB	781.29 KB	1	0	0	0	cpp_shm	655	4.49 MB	0	0	0.00	0.941	0	51	10/22 19:49:17
109550012	0.90	126.45 <u>M</u>	30 ms	76.22 MB	0 B	0	0	0	0	срр	548	3.32 MB	0	0	0.00	0.900	0	49	10/24 23:18:49
0710028	0.00	934	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	397	3.14 MB	0	0	0.00	0.000	0	0	10/3 18:59:12
0716100	0.00	<u>o</u>	10 ms	82.64 MB	0 B	0	0	0	0	cpp_shm	305	2.92 MB	0	0	0.00	0.000	0	0	10/3 22:00:13
109550014	0.00	0	10 ms	82.64 MB	0 B	0	0	0	0	cpp_shm	304	2.93 MB	0	0	0.00	0.000	0	0	10/3 21:51:33
109550153	0.00	980	10 ms	80.66 MB	0 B	0	0	0	0	cpp_shm	400	3.3 MB	0	0	0.00	0.000	0	0	10/3 23:13:45

```
number of submission = 100
number of effective submission (priority>0) = 92
remaining p_score = 0.00
```

## **Field Definitions**

```
 \begin{array}{l} if (gcc \mid illegal\_func \mid illegal\_header \mid missing), \\ priority = 0 \\ func = 0 \\ else, \\ func = check * (0.95^m\_error) \\ if (check==1), \\ perf\_I1 = lg(2+787633234)/lg(2+I\_refs) \\ perf\_I2 = lg(2+120000)/lg(2+cpu\_time)) \\ perf\_I = (perf\_I1>0)? perf\_I1: perf\_I2 \\ priority = perf\_I * max( lg(2+119455744)/lg(2+m\_peak) , lg(2+2468*11460608)/lg(2+flt*maxrss)) \\ else, \\ priority = 0 \\ \end{array}
```

```
p_score = schedule(6000, priority)

if (m_peak > 0),
   func *= (m_peak-heap_lost)/m_peak

diversity = -ln( [number of effective submissions using the same language] / [number of effective submissions] ) * 1.00

score = min( func*(0.60*100 + 0.40*p_score + diversity), 100)
```