HW2. Sparse Matrix

Deadline: 2021-10-17 23:59:59

id	check	l_refs	cpu_time	m_peak	lost	m.e.	gcc	i.f.	i.h.	lang	flt	maxrss	?	priority	diversity	func	p_score	score	submission_time
109550098	1.00	12.86 M	10 ms	27.88 MB	0 B	0	0	0	0	cpp_shm	542	6.77 MB	0	1.217	1.68	1.000	93	99	10/17 23:58:54
109550074	1.00	22.07 M	10 ms	26.53 MB	0 B	0	0	0	0	cpp_shm	650	7.21 MB	0	1.165	1.68	1.000	89	97	10/8 13:22:53
109550206	1.00	33.91 M	20 ms	27.22 MB	0 B	0	0	0	0	cpp_shm	797	7.45 MB	0	1.125	1.68	1.000	86	96	10/17 20:57:14
110550023	1.00	67.76 M	20 ms	27.3 MB	0 B	0	0	0	0	cpp_shm	805	7.87 MB	0	1.081	1.68	1.000	83	95	10/17 23:30:27
109550094	1.00	77.79 M	20 ms	27.32 MB	0 B	0	0	0	0	cpp_shm	830	8.16 MB	0	1.073	1.68	1.000	82	94	10/17 21:21:57
109550124	1.00	94.08 M	20 ms	16.25 MB	0 B	0	0	0	0	cpp	564	3.84 MB	0	1.112	0.24	1.000	85	94	10/17 20:56:29
109550182	1.00	103.64 M	50 ms	16.11 MB	0 B	0	0	0	0	cpp	528	3.69 MB	0	1.112	0.24	1.000	85	94	10/10 16:22:53
109550082	1.00	94.63 M	20 ms	16.25 MB	0 B	0	0	0	0	cpp	566	3.85 MB	0	1.111	0.24	1.000	85	94	10/17 23:50:17
109550018	1.00	103.45 M	50 ms	16.11 MB	0 B	0	0	0	0	cpp	538	3.7 MB	0	1.111	0.24	1.000	85	94	10/10 20:25:10
109550054	1.00	94.64 M	20 ms	16.25 MB	0 B	0	0	0	0	cpp	573	3.89 MB	0	1.110	0.24	1.000	85	94	10/15 16:53:40
109550160	1.00	148.29 M	30 ms	15.81 MB	0 B	0	0	0	0	cpp	464	3.23 MB	0	1.104	0.24	1.000	84	94	10/9 22:41:32
109550070	1.00	150.85 M	20 ms	15.81 MB	0 B	0	0	0	0	cpp	465	3.25 MB	0	1.102	0.24	1.000	84	94	10/13 23:02:28
109550132	1.00	105.41 M	20 ms	16.32 MB	0 B	0	0	0	0	cpp	617	3.8 MB	0	1.101	0.24	1.000	84	94	10/17 17:14:48
109550053	1.00	83.72 M	20 ms	17.03 MB	0 B	0	0	0	0	cpp	793	4.91 MB	0	1.099	0.24	1.000	84	94	10/13 20:04:40
109550174	1.00	148.38 M	20 ms	15.82 MB	0 B	0	0	0	0	cpp	490	3.41 MB	0	1.098	0.24	1.000	84	94	10/14 13:40:00
109550022	1.00	154.57 M	20 ms	15.81 MB	0 B	0	0	0	0	cpp	477	3.39 MB	0	1.098	0.24	1.000	84	94	10/13 22:57:28

109550068	1.00	175.64 M	150 ms	26.15 MB	0 B	0	0	0	0	cpp_shm	535	6.97 MB	0	1.049	1.68	1.000	80	94	10/9 05:15:49
109550110	1.00	119.33 M	30 ms	27.33 MB	0 B	0	0	0	0	cpp_shm	831	8.02 MB	0	1.048	1.68	1.000	80	94	10/14 22:51:16
109652026	1.00	92.64 M	20 ms	16.88 MB	0 B	0	0	0	0	cpp	756	4.73 MB	0	1.093	0.24	1.000	84	94	10/16 13:27:04
109652053	1.00	94.16 M	20 ms	16.88 MB	0 B	0	0	0	0	cpp	748	4.52 MB	0	1.092	0.24	1.000	83	94	10/17 20:22:09
109550096	1.00	147.44 M	20 ms	16.18 MB	0 B	0	0	0	0	cpp	534	3.72 MB	0	1.090	0.24	1.000	83	94	10/14 14:36:45
109550158	1.00	125.87 M	40 ms	16.24 MB	0 B	0	0	0	0	cpp	590	4.11 MB	0	1.089	0.24	1.000	83	94	10/16 07:24:38
109550006	1.00	148.37 M	30 ms	16.11 MB	0 B	0	0	0	0	cpp	543	3.83 MB	0	1.087	0.24	1.000	83	93	10/15 04:05:39
0816068	1.00	128.42 M	30 ms	16.35 MB	0 B	0	0	0	0	cpp	619	3.98 MB	0	1.087	0.24	1.000	83	93	10/16 16:50:21
109550130	1.00	149.09 M	20 ms	16.18 MB	0 B	0	0	0	0	cpp	547	3.82 MB	0	1.087	0.24	1.000	83	93	10/14 15:17:40
0711624	1.00	198.85 M	160 ms	26.28 MB	0 B	0	0	0	0	cpp_shm	575	6.99 MB	0	1.039	1.68	1.000	79	93	10/17 02:16:56
109550138	1.00	195.14 M	30 ms	15.89 MB	0 B	0	0	0	0	cpp	465	3.45 MB	0	1.085	0.24	1.000	83	93	10/17 18:15:27
109550016	1.00	207.91 M	40 ms	26.36 MB	0 B	0	0	0	0	cpp_shm	610	6.59 MB	0	1.036	1.68	1.000	79	93	10/17 21:54:03
109550133	1.00	102.65 M	30 ms	18.5 MB	0 B	0	0	0	0	cpp	1.11 K	6.18 MB	0	1.081	0.24	1.000	83	93	9/30 21:32:58
109550106	1.00	130.27 M	60 ms	16.5 MB	0 B	0	0	0	0	cpp	654	4.34 MB	0	1.079	0.24	1.000	82	93	10/17 04:30:06
109550164	1.00	130.84 M	70 ms	16.5 MB	0 B	0	0	0	0	cpp	650	4.36 MB	0	1.079	0.24	1.000	82	93	10/10 16:53:16
109550118	1.00	136.03 M	70 ms	16.5 MB	0 B	0	0	0	0	cpp	655	4.17 MB	0	1.078	0.24	1.000	82	93	10/17 10:41:36
109550071	1.00	133.6 M	70 ms	16.5 MB	0 B	0	0	0	0	cpp	653	4.36 MB	0	1.077	0.24	1.000	82	93	10/13 14:26:14
610001007	1.00	238.74 M	130 ms	15.85 MB	0 B	0	0	0	0	cpp	471	3.21 MB	0	1.076	0.24	1.000	82	93	10/2 13:28:27
109550156	1.00	212.79 M	120 ms	16.11 MB	0 B	0	0	0	0	cpp	528	3.65 MB	0	1.070	0.24	1.000	82	93	10/15 12:05:59

109652017	1.00	241.91 M	40 ms	15.89 MB	0 B	0	0	0	0	cpp	501	3.47 MB	0	1.069	0.24	1.000	82	93	10/17 02:27:55
109550046	1.00	207.95 M	110 ms	16.11 MB	0 B	0	0	0	0	cpp	558	3.79 MB	0	1.067	0.24	1.000	82	93	10/17 10:59:55
0712211	1.00	211.61 M	110 ms	16.11 MB	0 B	0	0	0	0	cpp	554	3.8 MB	0	1.066	0.24	1.000	82	93	10/1 13:36:53
0816138	1.00	218.58 M	160 ms	15.98 MB	0 B	0	0	0	0	cpp	526	3.88 MB	0	1.066	0.24	1.000	81	93	10/8 12:32:52
109652042	1.00	260.6 M	30 ms	15.88 MB	0 B	0	0	0	0	cpp	498	3.4 MB	0	1.066	0.24	1.000	81	93	10/17 01:00:59
109550050	1.00	256.81 M	190 ms	15.86 MB	0 B	0	0	0	0	cpp	474	3.64 MB	0	1.066	0.24	1.000	81	93	10/11 02:52:47
109550142	1.00	256.96 M	150 ms	15.86 MB	0 B	0	0	0	0	cpp	478	3.66 MB	0	1.065	0.24	1.000	81	93	10/16 02:14:18
0712254	1.00	213.68 M	100 ms	16.24 MB	0 B	0	0	0	0	cpp	579	3.97 MB	0	1.062	0.24	1.000	81	93	10/9 15:42:26
109550088	1.00	221.26 M	100 ms	16.12 MB	0 B	0	0	0	0	cpp	561	3.97 MB	0	1.061	0.24	1.000	81	93	10/12 23:57:06
0717030	1.00	375.4 M	40 ms	26.04 MB	0 B	0	0	0	0	cpp_shm	509	6.64 MB	0	1.013	1.68	1.000	77	93	10/17 22:19:58
109550126	1.00	303.75 M	170 ms	15.98 MB	0 B	0	0	0	0	cpp	519	3.77 MB	0	1.050	0.24	1.000	80	92	10/16 23:43:27
109550086	1.00	361.73 M	80 ms	15.89 MB	0 B	0	0	0	0	cpp	515	3.26 MB	0	1.048	0.24	1.000	80	92	10/16 09:59:24
0516048	1.00	211.9 M	40 ms	16.27 MB	120 KB	0	0	0	0	cpp	560	3.64 MB	0	1.068	0.24	0.993	82	92	10/17 16:48:55
109550184	1.00	383.02 M	230 ms	15.86 MB	0 B	0	0	0	0	cpp	473	3.51 MB	0	1.046	0.24	1.000	80	92	10/17 21:32:01
109550002	1.00	220.02 M	110 ms	16.88 MB	0 B	0	0	0	0	cpp	729	4.52 MB	0	1.044	0.24	1.000	80	92	10/15 01:40:36
109550026	1.00	217.36 M	100 ms	17.09 MB	0 B	0	0	0	0	cpp	872	5.02 MB	0	1.044	0.24	1.000	80	92	10/4 22:14:16
109550052	1.00	414.7 M	70 ms	15.82 MB	0 B	0	0	0	0	cpp	470	3.39 MB	0	1.044	0.24	1.000	80	92	10/16 10:08:38
109550178	1.00	232.81 M	120 ms	16.63 MB	0 B	0	0	0	0	cpp	678	4.47 MB	0	1.043	0.24	1.000	80	92	10/17 21:51:13
109550150	1.00	280.19 M	220 ms	16.5 MB	0 B	0	0	0	0	cpp	649	4.35 MB	0	1.037	0.24	1.000	79	92	10/9 01:08:18

109550134	1.00	372.93 M	200 ms	16.11 MB	0 B	0	0	0	0	cpp	558	3.9 MB	0	1.034	0.24	1.000	79	92	10/17 19:05:26
109550066	1.00	336.49 M	60 ms	30.68 MB	0 B	0	0	0	0	cpp_shm	1.82 K	10.88 MB	0	0.986	1.68	1.000	75	92	10/17 18:29:26
0811619	1.00	242.27 M	100 ms	18.55 MB	0 B	0	0	0	0	cpp	1.5 K	5.51 MB	0	1.033	0.24	1.000	79	92	10/16 00:47:29
610001005	1.00	376.07 M	230 ms	16.11 MB	0 B	0	0	0	0	cpp	561	3.96 MB	0	1.033	0.24	1.000	79	92	10/15 16:49:35
109550168	1.00	470.64 M	60 ms	15.95 MB	0 B	0	0	0	0	cpp	534	3.34 MB	0	1.032	0.24	1.000	79	92	10/15 12:30:11
0816077	1.00	528.84 M	370 ms	15.85 MB	0 B	0	0	0	0	cpp	478	3.62 MB	0	1.027	0.24	1.000	79	92	10/17 20:00:57
109550020	1.00	390.28 M	190 ms	32.26 MB	0 B	0	0	0	0	cpp_shm	1.35 K	15.94 MB	0	0.976	1.68	1.000	75	92	10/17 01:08:03
109550076	1.00	493.28 M	210 ms	16.24 MB	0 B	0	0	0	0	cpp	573	4 MB	0	1.017	0.24	1.000	78	91	10/11 20:53:43
109550038	1.00	449.29 M	100 ms	16.76 MB	0 B	0	0	0	0	cpp	705	4.57 MB	0	1.007	0.24	1.000	77	91	10/17 02:18:54
109550128	1.00	617.4 M	340 ms	16.24 MB	0 B	0	0	0	0	cpp	567	4.05 MB	0	1.006	0.24	1.000	77	91	10/3 15:53:35
baseline	1.00	524.2 M	420 ms	16.63 MB	0 B	0	0	0	0	cpp	687	4.55 MB	0	1.000	0.24	1.000	76	91	9/29 19:57:02
109550058	1.00	542.11 M	100 ms	17.32 MB	0 B	0	0	0	0	cpp	996	4.6 MB	0	0.996	0.24	1.000	76	91	10/14 18:11:57
109550090	1.00	957.68 M	140 ms	16.25 MB	0 B	0	0	0	0	cpp	592	4.14 MB	0	0.982	0.24	1.000	75	90	10/16 12:47:16
M093638	1.00	3.84 G	520 ms	79.55 MB	0 B	0	0	0	0	python	2.75 K	12.57 MB	0	0.831	3.62	1.000	64	89	10/1 22:44:10
109550162	1.00	5.97 G	840 ms	75.93 MB	0 B	0	0	0	0	python	2.19 K	11.21 MB	0	0.817	3.62	1.000	62	89	10/14 21:29:04
109550100	1.00	6.58 G	840 ms	16.05 MB	0 B	0	0	0	0	cpp	489	3.43 MB	0	0.913	0.24	1.000	70	88	10/16 17:14:31
109550146	1.00	6.97 G	2 s	15.89 MB	0 B	0	0	0	0	cpp	499	3.31 MB	0	0.912	0.24	1.000	70	88	10/13 22:09:17
109550044	1.00	349.8 M	70 ms	26.09 MB	0 B	1	0	0	0	cpp_shm	527	6.54 MB	0	1.016	1.68	0.950	78	88	10/16 23:48:27
0812102	1.00	4.18 G	460 ms	17.37 MB	0 B	0	0	0	0	cpp	1018	4.36 MB	0	0.903	0.24	1.000	69	88	10/17 15:06:38

0812236	1.00	5.66 G	4 s	389.63 MB	0 B	0	0	0	0	cpp_shm	91.2 K	369.66 MB	0	0.751	1.68	1.000	57	85	10/17 19:16:01
109550049	1.00	936.83 M	420 ms	15.85 MB	25.9 KB	4	0	0	0	cpp	480	3.7 MB	0	0.998	0.24	0.813	76	74	10/17 18:35:31
0816078	1.00	134.08 M	30 ms	16.35 MB	0 B	0	0	0	0	cpp	610	3.87 MB	0	0	0.00	1.000	0	55	10/24 02:17:52
109101012	1.00	149.15 M	60 ms	16.11 MB	0 B	0	0	0	0	cpp	558	3.78 MB	0	0	0.00	1.000	0	55	10/18 00:26:20
109550001	1.00	108.21 M	30 ms	16.07 MB	0 B	0	0	0	0	cpp	522	3.57 MB	0	0	0.00	1.000	0	55	10/24 23:57:52
109550154	1.00	149.13 M	30 ms	26.11 MB	0 B	0	0	0	0	cpp_shm	523	6.55 MB	0	0	0.00	1.000	0	55	10/30 01:18:20
109700045	1.00	328.82 M	160 ms	27.32 MB	0 B	0	0	0	0	cpp_shm	829	7.93 MB	0	0	0.00	1.000	0	55	10/18 01:17:48
0813463	1.00	48.92 G	6 s	83.57 MB	0 B	0	0	0	0	python	2.35 K	12.78 MB	0	0	0.00	1.000	0	55	10/22 17:06:55
309552002	1.00	48.93 G	6 s	83.52 MB	0 B	0	0	0	0	python	2.35 K	12.76 MB	0	0	0.00	1.000	0	55	10/22 15:51:40
0816003	1.00	355.66 M	260 ms	16.62 MB	407.3 KB	2	0	0	0	cpp	681	4.32 MB	0	0	0.00	0.881	0	48	10/21 17:02:30
0713339	0.70	173.03 M	120 ms	15.85 MB	0 B	0	0	0	0	cpp	469	3.65 MB	0	0	0.00	0.700	0	42	10/17 21:40:21
0812249	0.50	194.64 M	100 ms	16.11 MB	0 B	0	0	0	0	cpp	557	3.98 MB	0	0	0.00	0.500	0	30	10/17 23:56:55
0717078	0.10	731.99 M	370 ms	16.25 MB	571.73 KB	4	0	0	0	cpp	578	4.09 MB	0	0	0.00	0.079	0	0	10/18 00:04:45
0816079	0.00	0	10 ms	-1	0 B	0	0	0	0	cpp	306	3 MB	1	0	0.00	0.000	0	0	10/16 21:30:13
109550085	0.00	250.51 M	140 ms	15.72 MB	1.41 KB	1	0	0	0	cpp	463	3.57 MB	0	0	0.00	0.000	0	0	10/18 00:13:21

number of submission = 88

number of effective submission (priority>0) = 75

remaining p_score = 0.00

Field Definitions

```
if (gcc | illegal_func | illegal_header | missing),
    priority = 0
    func = 0
else,
    func = check * (0.95^m_error)
    if ( check==1 ),
        perf_I1 = lg(2+549660258)/lg(2+I_refs)
        perf_I2 = lg(2+420000)/lg(2+cpu_time) )
        perf_I = (perf_I1>0) ? perf_I1 : perf_I2
        priority = perf_I * max( lg(2+17440768)/lg(2+m_peak) , lg(2+687*4767744)/lg(2+flt*maxrss) )
    else,
        priority = 0

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)
```