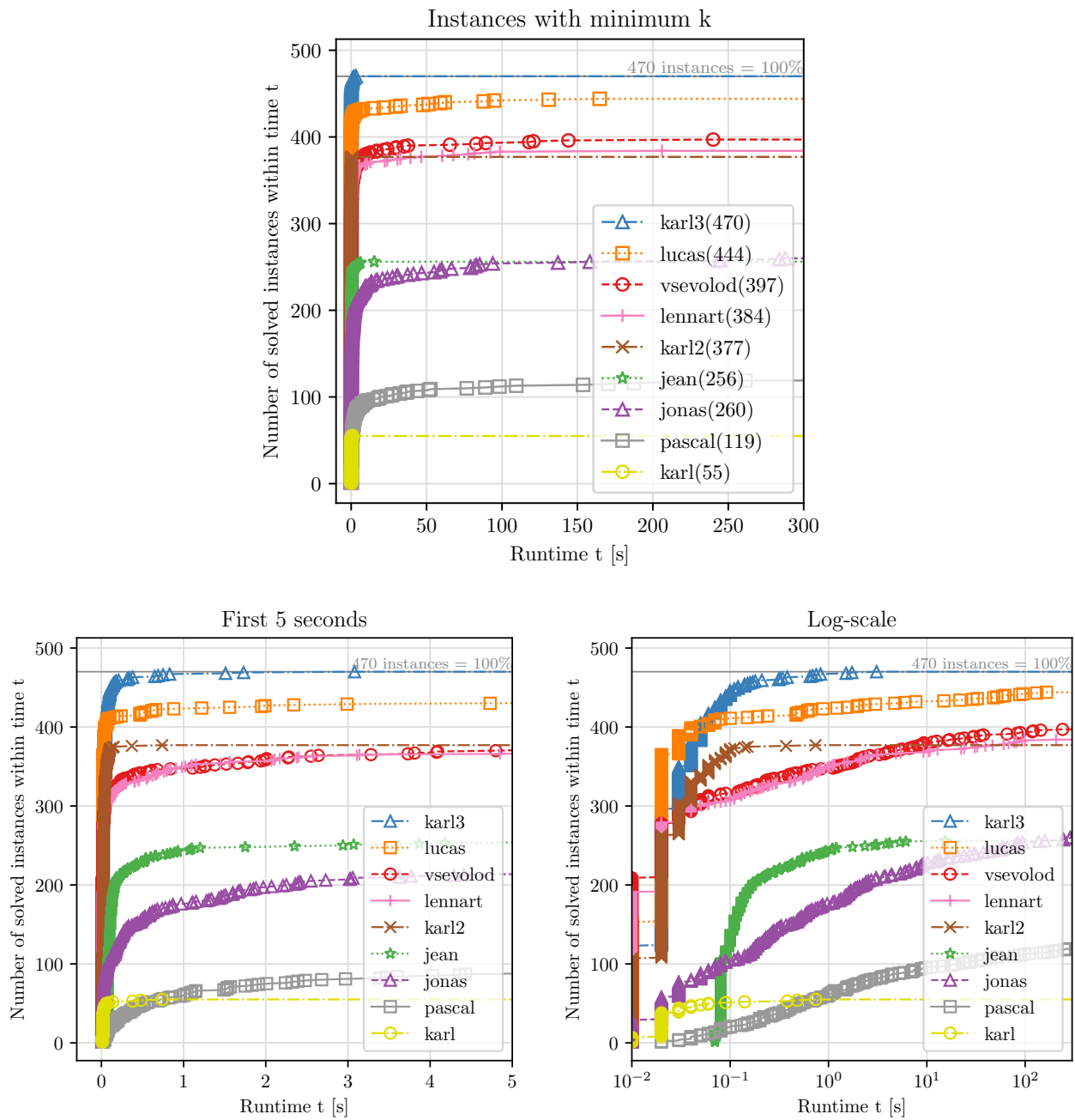


1 SAT Lecture 2026 - Exercise 3.3 - Stardew Valley Soil Tilling Problem

470 instances
running 64 threads in parallel on EPYC 7713 64-Core
with 300s timeout



karl2 (30.06.2026): Fixed a typo which led to skipped cardinality constraints (provided by Karl)

karl3 (02.07.2026): Fixed an uninitialized array allocation which made preprocessing nondeterministic (applied by Nicco)

Table 1: Instances with at least 3 reported results: 463/470. For each such instance, compare k relative to others

Student	k minimal	k not minimal
karl3	463	0
lucas	442	0
vsevolod	397	0
lennart	384	0
karl2	377	68
jonas	260	0
jean	256	192
pascal	119	0
karl	55	390

Table 2: runtime and k per instance

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w10-h3-rep1.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.03 5	0.72 5	0.01 13
gen-w10-h3-rep2.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 7	0.08 7	0.03 7	2.68 7	0.01 13
gen-w10-h3-rep3.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 7	0.08 7	0.07 7	8.71 7	0.01 13
gen-w10-h3-rep4.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.08 6	0.03 6	1.49 6	0.01 14
gen-w10-h3-rep5.sdvstp	0.01 4	0.01 4	0.01 4	— —	0.01 4	0.08 4	0.02 4	0.45 4	0.01 4
gen-w10-h4-rep1.sdvstp	0.01 8	0.02 8	0.01 8	0.01 8	0.02 8	0.08 8	0.12 8	211.01 8	0.01 17
gen-w10-h4-rep2.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.19 8	52.57 8	0.01 17
gen-w10-h4-rep3.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.23 8	76.63 8	0.01 16
gen-w10-h4-rep4.sdvstp	0.02 5	0.02 5	0.01 5	0.01 5	0.01 5	0.08 5	0.03 5	1.91 5	0.01 10
gen-w10-h4-rep5.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.23 8	88.90 8	0.01 15
gen-w10-h5-rep1.sdvstp	0.02 8	0.02 8	0.01 8	0.01 8	0.02 8	0.08 8	0.19 8	— —	0.01 25
gen-w10-h5-rep2.sdvstp	0.01 9	0.01 9	0.01 9	0.01 9	0.01 9	0.09 10	0.32 9	— —	0.01 20
gen-w10-h5-rep3.sdvstp	0.01 9	0.02 9	0.01 9	0.01 9	0.02 9	0.08 9	0.22 9	— —	0.01 17
gen-w10-h5-rep4.sdvstp	0.02 10	0.01 10	0.01 10	0.01 10	0.01 10	0.11 10	0.50 10	— —	0.01 25
gen-w10-h5-rep5.sdvstp	0.02 8	0.01 8	0.01 8	0.01 8	0.02 8	0.10 9	0.44 8	— —	0.01 29
gen-w10-h6-rep1.sdvstp	0.02 5	0.02 5	0.01 5	0.01 5	0.02 5	0.08 5	0.16 5	9.72 5	0.01 21
gen-w10-h6-rep2.sdvstp	0.02 9	0.01 9	0.01 9	0.01 9	0.02 9	0.10 9	1.31 9	— —	0.01 24
gen-w10-h6-rep3.sdvstp	0.02 9	0.01 9	0.01 9	0.01 9	0.01 9	0.13 9	0.27 9	— —	0.01 24
gen-w10-h6-rep4.sdvstp	0.02 8	0.01 8	0.01 8	0.01 8	0.02 8	0.10 8	0.30 8	— —	0.01 20
gen-w10-h6-rep5.sdvstp	0.02 8	0.02 8	0.01 8	0.01 8	0.02 8	0.12 8	0.78 8	— —	0.01 25
gen-w10-h7-rep1.sdvstp	0.02 11	0.01 11	0.02 11	0.02 11	0.02 11	0.10 12	2.21 11	— —	0.01 32
gen-w10-h7-rep2.sdvstp	0.02 11	0.01 11	0.01 11	0.01 11	0.02 11	0.14 12	0.97 11	— —	0.01 30
gen-w10-h7-rep3.sdvstp	0.02 11	0.02 11	0.02 11	0.02 11	0.02 11	0.11 11	3.02 11	— —	0.01 40
gen-w10-h7-rep4.sdvstp	0.02 13	0.02 13	0.01 13	0.02 13	0.02 13	0.13 13	8.59 13	— —	0.01 34
gen-w10-h7-rep5.sdvstp	0.02 12	0.02 12	0.01 12	0.01 12	0.02 12	0.14 12	8.88 12	— —	0.01 31
gen-w10-h9-rep1.sdvstp	0.02 10	0.02 10	0.02 10	0.02 10	0.02 10	0.14 12	3.77 10	— —	0.01 50

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w10-h9-rep2.sdvstp	0.03 15	0.02 15	0.02 15	0.02 15	0.03 15	0.22 15	79.07 15	—	0.01 61
gen-w10-h9-rep3.sdvstp	0.02 13	0.02 13	0.05 13	0.03 13	0.02 13	0.12 13	6.68 13	—	0.01 49
gen-w10-h9-rep4.sdvstp	0.02 14	0.02 14	0.02 14	0.02 14	0.02 14	0.15 15	16.34 14	—	0.01 39
gen-w10-h9-rep5.sdvstp	0.03 13	0.02 13	0.01 13	0.02 13	0.02 13	0.15 13	9.18 13	—	0.01 39
gen-w12-h11-rep1.sdvstp	0.03 13	0.02 13	0.02 13	0.02 13	0.03 13	0.16 13	58.77 13	—	0.01 55
gen-w12-h11-rep2.sdvstp	0.04 15	0.02 15	0.05 15	0.03 15	0.04 15	0.31 17	—	—	0.01 71
gen-w12-h11-rep3.sdvstp	0.03 16	0.02 16	0.02 16	0.02 16	0.03 16	0.23 16	—	—	0.01 48
gen-w12-h11-rep4.sdvstp	0.04 19	0.02 19	0.03 19	0.02 19	0.03 19	0.42 19	—	—	0.01 66
gen-w12-h11-rep5.sdvstp	0.04 19	0.02 19	0.02 19	0.02 19	0.04 19	0.53 19	—	—	0.01 50
gen-w12-h3-rep1.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.23 8	19.33 8	0.01 17
gen-w12-h3-rep2.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.08 6	0.03 6	1.83 6	0.01 10
gen-w12-h3-rep3.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.11 8	0.05 8	51.40 8	0.01 14
gen-w12-h3-rep4.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.09 8	17.62 8	0.01 13
gen-w12-h3-rep5.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.07 5	0.02 5	1.01 5	0.01 9
gen-w12-h4-rep1.sdvstp	0.01 10	0.01 10	0.01 10	0.01 10	0.01 10	0.10 10	0.33 10	—	0.01 15
gen-w12-h4-rep2.sdvstp	0.02 11	0.01 11	0.01 11	0.01 11	0.02 11	0.09 11	0.58 11	—	0.01 27
gen-w12-h4-rep3.sdvstp	0.02 11	0.01 11	0.02 11	0.02 11	0.01 11	0.10 11	0.62 11	—	0.01 34
gen-w12-h4-rep4.sdvstp	0.02 8	0.02 8	0.01 8	0.01 8	0.02 8	0.12 8	0.19 8	—	0.02 17
gen-w12-h4-rep5.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.08 8	—	0.01 15
gen-w12-h5-rep1.sdvstp	0.02 9	0.02 9	0.01 9	0.02 9	0.01 9	0.11 9	0.87 9	—	0.02 23
gen-w12-h5-rep2.sdvstp	0.02 8	0.01 8	0.02 8	0.01 8	0.02 8	0.10 8	0.37 8	—	0.01 34
gen-w12-h5-rep3.sdvstp	0.02 14	0.01 14	0.01 14	0.01 14	0.02 14	0.11 14	9.10 14	—	0.01 27
gen-w12-h5-rep4.sdvstp	0.02 9	0.02 9	0.01 9	0.01 9	0.02 9	0.09 10	0.48 9	—	0.01 23
gen-w12-h5-rep5.sdvstp	0.02 6	0.02 6	0.03 6	0.01 6	0.02 6	0.08 6	0.17 6	23.48 6	0.01 26
gen-w12-h6-rep1.sdvstp	0.03 10	0.02 10	0.01 10	0.01 10	0.02 10	0.09 10	0.86 10	—	0.02 24
gen-w12-h6-rep2.sdvstp	0.02 17	0.01 17	0.01 17	0.01 17	0.02 17	0.29 18	—	—	0.01 34
gen-w12-h6-rep3.sdvstp	0.02 13	0.01 13	0.01 13	0.02 13	0.02 13	0.15 13	6.10 13	—	0.01 35
gen-w12-h6-rep4.sdvstp	0.02 11	0.02 11	0.02 11	0.03 11	0.02 11	0.12 11	1.28 11	—	0.01 37
gen-w12-h6-rep5.sdvstp	0.02 10	0.02 10	0.02 10	0.02 10	0.02 10	0.09 10	0.59 10	—	0.01 35
gen-w12-h7-rep1.sdvstp	0.02 16	0.02 16	0.01 16	0.01 16	0.02 16	0.22 16	287.85 16	—	0.01 34
gen-w12-h7-rep2.sdvstp	0.02 12	0.04 12	0.06 12	0.03 12	0.02 12	0.16 13	6.52 12	—	0.01 58
gen-w12-h7-rep3.sdvstp	0.02 13	0.02 13	0.02 13	0.01 13	0.02 13	0.13 13	13.28 13	—	0.01 34
gen-w12-h7-rep4.sdvstp	0.02 15	0.02 15	0.02 15	0.02 15	0.02 15	0.17 15	—	—	0.01 41
gen-w12-h7-rep5.sdvstp	0.02 14	0.02 14	0.02 14	0.02 14	0.02 14	0.17 14	46.77 14	—	0.01 47
gen-w12-h9-rep1.sdvstp	0.03 18	0.02 18	0.03 18	0.02 18	0.03 18	0.38 18	—	—	0.01 44
gen-w12-h9-rep2.sdvstp	0.04	0.02	0.23	0.16	0.03	0.18	—	—	0.01

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	15	15	15	15	15	16	—	—	77
gen-w12-h9-rep3.sdvstp	0.03	0.02	0.03	0.02	0.03	0.21	93.85	—	0.01
	15	15	15	15	15	16	15	—	53
gen-w12-h9-rep4.sdvstp	0.03	0.02	0.02	0.02	0.03	0.50	—	—	0.01
	18	18	18	18	18	19	—	—	48
gen-w12-h9-rep5.sdvstp	0.03	0.02	0.02	0.02	0.03	0.21	66.45	—	0.01
	14	14	14	14	14	15	14	—	43
gen-w14-h11-rep1.sdvstp	0.05	0.02	0.04	0.08	—	0.54	—	—	—
	18	18	18	18	—	18	—	—	—
gen-w14-h11-rep2.sdvstp	0.04	0.02	0.04	0.02	0.04	0.32	—	—	0.01
	16	16	16	16	17	18	—	—	72
gen-w14-h11-rep3.sdvstp	0.06	0.02	0.44	0.98	—	1.08	—	—	—
	22	22	22	22	—	24	—	—	—
gen-w14-h11-rep4.sdvstp	0.06	0.02	0.40	0.05	—	1.75	—	—	0.01
	25	25	25	25	—	25	—	—	81
gen-w14-h11-rep5.sdvstp	0.10	0.02	82.99	46.51	0.08	2.46	—	—	—
	28	28	28	28	28	31	—	—	—
gen-w14-h14-rep1.sdvstp	0.17	0.62	—	—	—	2.66	—	—	—
	29	29	—	—	—	32	—	—	—
gen-w14-h14-rep2.sdvstp	0.08	0.02	0.39	0.16	0.07	1.37	—	—	0.01
	24	24	24	24	25	25	—	—	93
gen-w14-h14-rep3.sdvstp	0.07	0.04	0.24	0.10	0.06	0.53	—	—	0.01
	19	19	19	19	19	19	—	—	97
gen-w14-h14-rep4.sdvstp	0.12	0.02	3.73	0.41	0.09	3.60	—	—	0.01
	32	32	32	32	32	34	—	—	97
gen-w14-h14-rep5.sdvstp	0.14	0.02	8.49	1.45	0.10	2.31	—	—	0.01
	28	28	28	28	28	30	—	—	98
gen-w14-h3-rep1.sdvstp	0.01	0.02	0.01	0.01	0.01	0.08	0.16	—	0.01
	8	8	8	8	8	9	8	—	26
gen-w14-h3-rep2.sdvstp	0.02	0.01	0.01	0.01	0.01	0.08	0.20	—	0.01
	8	8	8	8	8	8	8	—	21
gen-w14-h3-rep3.sdvstp	0.01	0.02	0.01	0.01	0.02	0.08	0.05	3.39	0.01
	5	5	5	5	5	5	5	5	17
gen-w14-h3-rep4.sdvstp	0.01	0.02	0.01	0.01	0.02	0.09	0.58	—	0.03
	11	11	11	11	11	11	11	—	16
gen-w14-h3-rep5.sdvstp	0.01	0.01	0.01	0.01	0.01	0.09	0.17	109.44	0.01
	8	8	8	8	8	8	8	8	17
gen-w14-h4-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.11	37.38	0.01
	7	7	7	7	7	7	7	7	11
gen-w14-h4-rep2.sdvstp	0.02	0.02	0.01	0.02	0.02	0.08	0.22	—	0.01
	9	9	9	9	9	9	9	—	34
gen-w14-h4-rep3.sdvstp	0.02	0.02	0.01	0.02	0.02	0.09	0.40	—	0.09
	8	8	8	8	8	9	8	—	32
gen-w14-h4-rep4.sdvstp	0.02	0.01	0.01	0.01	0.02	0.09	0.26	—	0.01
	8	8	8	8	8	9	8	—	20
gen-w14-h4-rep5.sdvstp	0.02	0.01	0.01	0.02	0.02	0.11	10.26	—	0.01
	13	13	13	13	13	13	13	—	21
gen-w14-h5-rep1.sdvstp	0.02	0.02	0.01	0.02	0.02	0.09	1.81	—	0.01
	10	10	10	10	10	10	10	—	36
gen-w14-h5-rep2.sdvstp	0.02	0.08	0.01	0.01	0.02	0.11	1.43	—	0.01
	12	12	12	12	12	12	12	—	30
gen-w14-h5-rep3.sdvstp	0.02	0.02	0.01	0.01	0.02	0.09	0.68	—	0.01
	9	9	9	9	9	11	9	—	30
gen-w14-h5-rep4.sdvstp	0.02	0.02	0.01	0.01	0.02	0.19	283.87	—	0.01
	15	15	15	15	15	15	15	—	35
gen-w14-h5-rep5.sdvstp	0.02	0.02	0.02	0.02	0.02	0.09	0.74	—	0.01
	9	9	9	9	9	10	9	—	39
gen-w14-h6-rep1.sdvstp	0.02	0.02	0.02	0.02	0.02	0.12	3.63	—	0.01
	12	12	12	12	12	12	12	—	37
gen-w14-h6-rep2.sdvstp	0.02	0.01	0.02	0.02	0.02	0.15	12.59	—	0.01
	14	14	14	14	14	14	14	—	42
gen-w14-h6-rep3.sdvstp	0.02	0.02	0.02	0.02	0.02	0.13	37.43	—	0.01
	14	14	14	14	14	15	14	—	40
gen-w14-h6-rep4.sdvstp	0.02	0.02	0.01	0.01	0.02	0.11	2.39	—	0.01
	10	10	10	10	10	11	10	—	42
gen-w14-h6-rep5.sdvstp	0.02	0.02	0.02	0.01	0.02	0.10	1.66	—	0.01
	11	11	11	11	11	11	11	—	35
gen-w14-h7-rep1.sdvstp	0.03	0.02	0.03	0.02	0.03	0.17	30.02	—	0.01
	14	14	14	14	14	15	14	—	46
gen-w14-h7-rep2.sdvstp	0.03	0.02	0.02	0.02	0.03	0.37	—	—	0.01
	17	17	17	17	17	19	—	—	45

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w14-h7-rep3.sdvstp	0.03 19	0.02 19	0.02 19	0.01 19	0.02 19	0.24 19	— —	— —	0.01 43
gen-w14-h7-rep4.sdvstp	0.02 17	0.02 17	0.03 17	0.03 17	0.02 17	0.30 18	— —	— —	0.02 47
gen-w14-h7-rep5.sdvstp	0.03 15	0.02 15	0.02 15	0.02 15	0.02 15	0.20 16	244.90 15	— —	0.01 47
gen-w14-h9-rep1.sdvstp	0.03 18	0.02 18	0.03 18	0.02 18	0.03 18	0.23 19	— —	— —	0.01 57
gen-w14-h9-rep2.sdvstp	0.05 19	0.02 19	1.11 19	0.69 19	0.05 19	0.48 19	— —	— —	0.07 85
gen-w14-h9-rep3.sdvstp	0.04 18	0.02 18	0.13 18	0.09 18	0.04 18	0.53 18	— —	— —	0.01 62
gen-w14-h9-rep4.sdvstp	0.04 19	0.02 19	0.08 19	0.02 19	0.03 19	0.54 19	— —	— —	0.01 77
gen-w14-h9-rep5.sdvstp	0.04 16	0.88 16	0.33 16	0.25 16	0.04 16	0.43 16	— —	— —	0.01 79
gen-w16-h11-rep1.sdvstp	0.05 26	0.02 26	0.23 26	0.02 26	— —	1.85 28	— —	— —	0.01 76
gen-w16-h11-rep2.sdvstp	0.07 19	0.02 19	1.26 19	0.55 19	0.06 19	0.86 21	— —	— —	— —
gen-w16-h11-rep3.sdvstp	0.10 21	1.99 21	2.28 21	5.42 21	0.09 21	1.18 24	— —	— —	0.02 103
gen-w16-h11-rep4.sdvstp	0.09 25	0.02 25	4.80 25	0.46 25	0.08 25	1.83 27	— —	— —	— —
gen-w16-h11-rep5.sdvstp	0.08 24	0.07 24	0.68 24	0.13 24	— —	1.56 25	— —	— —	0.01 88
gen-w16-h14-rep1.sdvstp	0.02 38	0.02 38	4.08 38	0.65 38	0.02 38	6.11 38	— —	— —	0.02 38
gen-w16-h14-rep2.sdvstp	0.02 38	0.03 38	0.35 38	1.09 38	0.02 38	5.72 39	— —	— —	0.02 38
gen-w16-h14-rep3.sdvstp	0.02 31	0.07 31	5.58 31	2.40 31	0.02 31	3.07 31	— —	— —	0.02 31
gen-w16-h14-rep4.sdvstp	0.02 36	0.03 36	144.05 36	30.68 36	0.02 37	8.63 38	— —	— —	0.02 37
gen-w16-h14-rep5.sdvstp	0.02 29	0.03 29	7.10 29	10.50 29	0.02 30	4.99 31	— —	— —	0.02 29
gen-w16-h3-rep1.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.15 12	0.53 11	— —	0.01 23
gen-w16-h3-rep2.sdvstp	0.01 11	0.01 11	0.01 11	0.02 11	0.01 11	0.11 11	1.15 11	— —	0.01 19
gen-w16-h3-rep3.sdvstp	0.01 4	0.02 4	0.01 4	0.01 4	0.01 4	0.08 4	0.02 4	2.39 4	0.01 13
gen-w16-h3-rep4.sdvstp	0.03 6	0.02 6	0.01 6	0.01 6	0.01 6	0.08 7	0.06 6	5.83 6	0.01 20
gen-w16-h3-rep5.sdvstp	0.01 10	0.02 10	0.01 10	0.01 10	0.01 10	0.10 11	0.53 10	— —	0.01 29
gen-w16-h4-rep1.sdvstp	0.02 8	0.02 8	0.01 8	0.01 8	0.02 8	0.09 8	0.42 8	— —	0.01 27
gen-w16-h4-rep2.sdvstp	0.02 12	0.01 12	0.01 12	0.01 12	0.02 12	0.13 12	3.06 12	— —	0.01 31
gen-w16-h4-rep3.sdvstp	0.02 12	0.02 12	0.01 12	0.01 12	0.02 12	0.10 12	1.97 12	— —	0.01 25
gen-w16-h4-rep4.sdvstp	0.02 11	0.01 11	0.02 11	0.01 11	0.02 11	0.10 11	1.49 11	— —	0.01 37
gen-w16-h4-rep5.sdvstp	0.02 14	0.02 14	0.01 14	0.02 14	0.02 14	0.15 15	20.80 14	— —	0.01 26
gen-w16-h5-rep1.sdvstp	0.02 17	0.02 17	0.02 17	0.02 17	0.02 17	0.32 17	— —	— —	0.01 37
gen-w16-h5-rep2.sdvstp	0.02 10	0.02 10	0.02 10	0.01 10	0.02 10	0.13 10	1.60 10	— —	0.01 38
gen-w16-h5-rep3.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.11 11	2.55 11	— —	0.01 33
gen-w16-h5-rep4.sdvstp	0.02 17	0.02 17	0.02 17	0.01 17	0.02 17	0.34 18	— —	— —	0.01 46
gen-w16-h5-rep5.sdvstp	0.02 10	0.02 10	0.02 10	0.01 10	0.02 10	0.09 10	1.85 10	— —	0.01 36
gen-w16-h6-rep1.sdvstp	0.02 12	0.02 12	0.02 12	0.01 12	0.02 12	0.12 12	2.42 12	— —	0.01 39
gen-w16-h6-rep2.sdvstp	0.03 15	0.02 15	0.02 15	0.02 15	0.02 15	0.15 16	243.74 15	— —	0.01 45
gen-w16-h6-rep3.sdvstp	0.03	0.02	0.05	0.04	0.03	0.35	—	—	0.02

continued on next page

Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	20	20	20	20	20	21	—	—	52
gen-w16-h6-rep4.sdvstp	0.03	0.02	0.02	0.02	0.03	0.23	82.02	—	0.01
	15	15	15	15	15	16	15	—	41
gen-w16-h6-rep5.sdvstp	0.03	0.02	0.02	0.02	0.03	0.17	17.30	—	0.01
	14	14	14	14	14	14	14	—	47
gen-w16-h7-rep1.sdvstp	0.03	0.02	0.02	0.02	0.03	0.24	—	—	0.01
	17	17	17	17	17	17	—	—	48
gen-w16-h7-rep2.sdvstp	0.04	0.05	0.06	0.06	0.04	0.20	23.96	—	0.01
	12	12	12	12	12	13	12	—	64
gen-w16-h7-rep3.sdvstp	0.04	0.02	0.04	0.04	0.03	0.16	7.81	—	0.01
	12	12	12	12	12	14	12	—	53
gen-w16-h7-rep4.sdvstp	0.03	0.02	0.03	0.02	0.03	0.84	—	—	0.01
	23	23	23	23	23	23	—	—	57
gen-w16-h7-rep5.sdvstp	0.03	0.02	0.02	0.01	0.03	0.11	13.52	—	0.01
	13	13	13	13	13	13	13	—	43
gen-w16-h9-rep1.sdvstp	0.04	0.02	0.05	0.02	—	0.49	—	—	—
	17	17	17	17	—	18	—	—	—
gen-w16-h9-rep2.sdvstp	0.05	0.66	0.28	0.45	0.05	0.56	—	—	—
	18	18	18	18	18	19	—	—	—
gen-w16-h9-rep3.sdvstp	0.06	0.02	0.18	1.56	0.06	0.93	—	—	0.01
	20	20	20	20	20	20	—	—	95
gen-w16-h9-rep4.sdvstp	0.05	0.05	0.19	0.14	0.04	0.35	—	—	0.01
	16	16	16	16	16	18	—	—	87
gen-w16-h9-rep5.sdvstp	0.04	0.02	0.03	0.02	0.04	0.24	137.12	—	0.01
	15	15	15	15	15	16	15	—	60
gen-w19-h11-rep1.sdvstp	0.02	1.22	16.41	9.24	0.02	1.77	—	—	0.02
	25	25	25	25	25	26	—	—	25
gen-w19-h11-rep2.sdvstp	0.02	0.02	1.79	0.29	—	4.19	—	—	—
	28	28	28	28	—	30	—	—	—
gen-w19-h11-rep3.sdvstp	0.02	2.34	11.49	12.83	—	2.21	—	—	—
	28	28	28	28	—	31	—	—	—
gen-w19-h11-rep4.sdvstp	0.02	0.19	23.99	32.59	—	2.65	—	—	—
	29	29	29	29	—	30	—	—	—
gen-w19-h11-rep5.sdvstp	0.02	0.02	5.27	1.15	—	3.40	—	—	—
	29	29	29	29	—	31	—	—	—
gen-w19-h14-rep1.sdvstp	0.02	62.11	—	—	0.03	9.94	—	—	0.02
	38	38	—	—	38	39	—	—	40
gen-w19-h14-rep2.sdvstp	0.02	4.73	—	—	0.02	18.28	—	—	0.02
	42	42	—	—	45	45	—	—	42
gen-w19-h14-rep3.sdvstp	0.02	0.03	—	—	0.02	3.95	—	—	0.02
	32	32	—	—	32	35	—	—	32
gen-w19-h14-rep4.sdvstp	0.03	0.03	—	—	0.04	6.56	—	—	0.04
	35	35	—	—	36	40	—	—	36
gen-w19-h14-rep5.sdvstp	0.02	0.03	—	—	0.02	5.84	—	—	0.02
	36	36	—	—	37	37	—	—	37
gen-w19-h18-rep1.sdvstp	0.05	—	—	—	0.06	27.11	—	—	0.06
	49	—	—	—	50	52	—	—	51
gen-w19-h18-rep2.sdvstp	0.04	—	—	—	0.04	9.24	—	—	0.05
	38	—	—	—	39	41	—	—	41
gen-w19-h18-rep3.sdvstp	0.02	0.61	—	—	0.02	33.40	—	—	0.02
	53	53	—	—	54	56	—	—	54
gen-w19-h18-rep4.sdvstp	0.03	0.03	—	—	0.03	29.16	—	—	0.03
	52	52	—	—	52	55	—	—	53
gen-w19-h18-rep5.sdvstp	0.05	0.03	—	—	0.07	24.75	—	—	0.04
	45	45	—	—	47	47	—	—	45
gen-w19-h3-rep1.sdvstp	0.02	0.02	0.01	0.01	0.01	0.12	1.60	—	0.01
	11	11	11	11	11	11	11	—	32
gen-w19-h3-rep2.sdvstp	0.02	0.02	0.01	0.01	0.02	0.10	0.83	—	0.01
	10	10	10	10	10	11	10	—	29
gen-w19-h3-rep3.sdvstp	0.02	0.02	0.01	0.01	0.02	0.09	0.06	5.25	0.08
	5	5	5	5	5	5	5	5	23
gen-w19-h3-rep4.sdvstp	0.02	0.01	0.01	0.01	0.02	0.11	1.46	—	0.01
	11	11	11	11	11	12	11	—	24
gen-w19-h3-rep5.sdvstp	0.02	0.02	0.02	0.01	0.01	0.11	0.30	—	0.01
	8	8	8	8	8	8	8	—	23
gen-w19-h4-rep1.sdvstp	0.02	0.01	0.01	0.02	0.02	0.12	0.48	—	0.01
	10	10	10	10	10	10	10	—	28
gen-w19-h4-rep2.sdvstp	0.02	0.02	0.01	0.01	0.02	0.14	1.69	—	0.01
	11	11	11	11	11	11	11	—	28
gen-w19-h4-rep3.sdvstp	0.02	0.02	0.01	0.02	0.02	0.15	4.41	—	0.01
	13	13	13	13	13	13	13	—	27

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w19-h4-rep4.sdvstp	0.02 12	0.02 12	0.01 12	0.01 12	0.02 12	0.11 12	2.73 12	— —	0.01 26
gen-w19-h4-rep5.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.11 12	1.88 11	— —	0.01 22
gen-w19-h5-rep1.sdvstp	0.02 10	0.10 10	0.02 10	0.02 10	0.02 10	0.10 10	1.10 10	— —	0.01 45
gen-w19-h5-rep2.sdvstp	0.02 15	0.02 15	0.02 15	0.02 15	0.02 15	0.18 15	— —	— —	0.01 37
gen-w19-h5-rep3.sdvstp	0.02 17	0.02 17	0.01 17	0.01 17	0.02 17	0.28 17	— —	— —	0.01 50
gen-w19-h5-rep4.sdvstp	0.03 15	0.02 15	0.02 15	0.02 15	0.03 15	0.17 15	60.17 15	— —	0.01 48
gen-w19-h5-rep5.sdvstp	0.02 17	0.02 17	0.01 17	0.01 17	0.02 17	0.26 18	— —	— —	0.01 36
gen-w19-h6-rep1.sdvstp	0.03 13	0.02 13	0.02 13	0.01 13	0.03 13	0.16 13	13.10 13	— —	0.01 42
gen-w19-h6-rep2.sdvstp	0.03 19	0.02 19	0.03 19	0.03 19	0.02 19	0.31 19	— —	— —	0.01 49
gen-w19-h6-rep3.sdvstp	0.04 16	0.02 16	0.02 16	0.02 16	0.04 16	0.31 17	— —	— —	0.01 54
gen-w19-h6-rep4.sdvstp	0.03 21	0.02 21	0.03 21	0.02 21	0.03 21	0.66 21	— —	— —	0.01 50
gen-w19-h6-rep5.sdvstp	0.03 14	0.02 14	0.06 14	0.01 14	0.03 14	0.14 14	85.17 14	— —	0.01 39
gen-w19-h7-rep1.sdvstp	0.05 21	1.95 21	3.81 21	2.07 21	0.06 21	0.89 21	— —	— —	0.01 80
gen-w19-h7-rep2.sdvstp	0.04 18	0.03 18	0.18 18	0.11 18	0.04 18	0.48 19	— —	— —	0.01 68
gen-w19-h7-rep3.sdvstp	0.04 18	0.02 18	0.02 18	0.02 18	0.04 18	0.63 19	— —	— —	0.01 52
gen-w19-h7-rep4.sdvstp	0.04 15	0.02 15	0.06 15	0.14 15	0.04 16	0.45 18	79.29 15	— —	0.01 71
gen-w19-h7-rep5.sdvstp	0.05 19	0.02 19	0.15 19	0.11 19	0.04 19	0.82 21	— —	— —	0.01 73
gen-w19-h9-rep1.sdvstp	0.08 25	0.02 25	7.35 25	0.91 25	0.09 25	1.36 26	— —	— —	— —
gen-w19-h9-rep2.sdvstp	0.08 26	0.02 26	2.55 26	3.14 26	— —	1.10 26	— —	— —	— —
gen-w19-h9-rep3.sdvstp	0.09 27	0.02 27	2.27 27	2.10 27	— —	1.71 29	— —	— —	0.01 95
gen-w19-h9-rep4.sdvstp	0.10 21	0.02 21	1.26 21	0.27 21	— —	1.09 21	— —	— —	0.02 101
gen-w19-h9-rep5.sdvstp	0.07 27	0.02 27	1.66 27	0.17 27	— —	1.76 28	— —	— —	— —
gen-w22-h11-rep1.sdvstp	0.02 33	0.03 33	89.20 33	98.63 33	0.02 33	5.34 33	— —	— —	0.02 33
gen-w22-h11-rep2.sdvstp	0.02 29	0.02 29	1.38 29	1.56 29	0.02 30	2.81 30	— —	— —	0.02 30
gen-w22-h11-rep3.sdvstp	0.02 32	0.04 32	— —	81.73 32	0.02 32	5.83 33	— —	— —	0.02 32
gen-w22-h11-rep4.sdvstp	0.02 31	0.02 31	— —	77.61 31	0.02 32	4.27 35	— —	— —	0.02 31
gen-w22-h11-rep5.sdvstp	0.02 40	0.24 40	240.00 40	— —	— —	6.17 41	— —	— —	— —
gen-w22-h14-rep1.sdvstp	0.03 47	0.49 47	— —	— —	0.03 47	22.05 49	— —	— —	0.03 47
gen-w22-h14-rep2.sdvstp	0.03 41	— —	— —	— —	0.03 42	19.10 44	— —	— —	0.03 42
gen-w22-h14-rep3.sdvstp	0.02 39	0.03 39	— —	— —	0.02 42	5.52 40	— —	— —	0.03 42
gen-w22-h14-rep4.sdvstp	0.02 41	0.03 41	— —	— —	0.02 41	8.54 43	— —	— —	0.02 41
gen-w22-h14-rep5.sdvstp	0.03 46	32.59 46	— —	— —	0.03 47	15.32 46	— —	— —	0.03 47
gen-w22-h18-rep1.sdvstp	0.06 45	— —	— —	— —	0.05 46	36.34 48	— —	— —	0.05 46
gen-w22-h18-rep2.sdvstp	0.05 49	0.04 49	— —	— —	0.04 50	37.96 51	— —	— —	0.05 50
gen-w22-h18-rep3.sdvstp	0.03 52	— —	— —	— —	0.03 53	61.36 54	— —	— —	0.03 54
gen-w22-h18-rep4.sdvstp	0.04	1.56	—	—	0.04	31.23	—	—	0.03

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	47	47	—	—	51	51	—	—	50
gen-w22-h18-rep5.sdvstp	0.08 51	— —	— —	— —	0.07 53	51.27 53	— —	— —	0.07 53
gen-w22-h3-rep1.sdvstp	0.02 9	0.01 9	0.02 9	0.01 9	0.02 9	0.08 9	0.18 9	— —	0.01 20
gen-w22-h3-rep2.sdvstp	0.02 13	0.02 13	0.01 13	0.01 13	0.02 13	0.13 13	5.92 13	— —	0.01 37
gen-w22-h3-rep3.sdvstp	0.02 6	0.01 6	0.01 6	0.01 6	0.02 6	0.08 6	0.07 6	14.76 6	0.01 18
gen-w22-h3-rep4.sdvstp	0.02 13	0.02 13	0.01 13	0.01 13	0.02 13	0.15 13	3.03 13	— —	0.01 21
gen-w22-h3-rep5.sdvstp	0.02 12	0.01 12	0.01 12	0.01 12	0.02 12	0.13 12	4.29 12	— —	0.01 30
gen-w22-h4-rep1.sdvstp	0.02 17	0.02 17	0.04 17	0.03 17	0.02 17	0.28 17	— —	— —	0.01 49
gen-w22-h4-rep2.sdvstp	0.02 12	0.02 12	0.02 12	0.01 12	0.02 12	0.14 12	2.36 12	— —	0.01 32
gen-w22-h4-rep3.sdvstp	0.02 16	0.02 16	0.02 16	0.02 16	0.02 16	0.21 16	— —	— —	0.01 42
gen-w22-h4-rep4.sdvstp	0.03 13	0.02 13	0.02 13	0.02 13	0.02 13	0.14 13	11.90 13	— —	0.01 37
gen-w22-h4-rep5.sdvstp	0.02 14	0.02 14	0.01 14	0.01 14	0.02 14	0.13 14	54.92 14	— —	0.01 34
gen-w22-h5-rep1.sdvstp	0.03 14	0.02 14	0.02 14	0.01 14	0.03 14	0.17 16	30.82 14	— —	0.01 43
gen-w22-h5-rep2.sdvstp	0.03 20	0.02 20	0.01 20	0.02 20	0.03 20	0.32 21	— —	— —	0.01 45
gen-w22-h5-rep3.sdvstp	0.03 15	0.02 15	0.02 15	0.01 15	0.03 15	0.15 15	58.87 15	— —	0.01 42
gen-w22-h5-rep4.sdvstp	0.03 23	0.02 23	0.14 23	0.11 23	0.04 23	0.95 24	— —	— —	0.01 74
gen-w22-h5-rep5.sdvstp	0.03 20	0.02 20	0.02 20	0.02 20	0.03 20	0.60 20	— —	— —	0.01 57
gen-w22-h6-rep1.sdvstp	0.04 20	0.02 20	0.04 20	0.02 20	0.04 20	0.32 20	— —	— —	0.01 61
gen-w22-h6-rep2.sdvstp	0.05 21	0.02 21	0.12 21	0.03 21	0.05 21	1.23 23	— —	— —	0.01 66
gen-w22-h6-rep3.sdvstp	0.03 15	0.02 15	0.02 15	0.02 15	0.03 15	0.22 16	— —	— —	0.02 52
gen-w22-h6-rep4.sdvstp	0.05 20	0.02 20	0.05 20	0.02 20	0.05 20	0.59 21	— —	— —	0.01 60
gen-w22-h6-rep5.sdvstp	0.06 20	0.02 20	0.22 20	0.07 20	0.06 20	0.68 21	— —	— —	0.02 74
gen-w22-h7-rep1.sdvstp	0.04 27	0.02 27	2.01 27	0.13 27	0.04 27	1.85 29	— —	— —	0.01 79
gen-w22-h7-rep2.sdvstp	0.05 20	0.02 20	0.04 20	0.02 20	0.05 20	0.62 21	— —	— —	0.01 56
gen-w22-h7-rep3.sdvstp	0.06 23	0.02 23	0.08 23	0.03 23	0.06 23	0.93 24	— —	— —	0.01 63
gen-w22-h7-rep4.sdvstp	0.04 14	0.02 14	0.03 14	0.03 14	0.04 14	0.26 15	83.06 14	— —	0.01 65
gen-w22-h7-rep5.sdvstp	0.06 25	0.02 25	0.55 25	0.22 25	0.06 25	1.16 26	— —	— —	0.01 74
gen-w22-h9-rep1.sdvstp	0.02 32	0.02 32	65.47 32	67.74 32	0.02 32	3.00 33	— —	— —	0.02 32
gen-w22-h9-rep2.sdvstp	0.02 25	0.06 25	17.03 25	0.67 25	— —	1.74 27	— —	— —	— —
gen-w22-h9-rep3.sdvstp	0.02 30	0.02 30	1.52 30	3.11 30	0.02 30	2.35 30	— —	— —	0.02 30
gen-w22-h9-rep4.sdvstp	0.02 30	0.02 30	6.62 30	4.85 30	— —	2.35 31	— —	— —	— —
gen-w22-h9-rep5.sdvstp	0.02 22	0.06 22	4.09 22	0.84 22	0.02 22	2.58 24	— —	— —	0.02 22
gen-w26-h11-rep1.sdvstp	0.03 42	0.03 42	— —	— —	0.03 42	18.41 45	— —	— —	0.48 42
gen-w26-h11-rep2.sdvstp	0.02 38	0.03 38	29.89 38	0.80 38	0.03 39	7.90 41	— —	— —	0.02 39
gen-w26-h11-rep3.sdvstp	0.02 31	— —	— —	— —	0.02 31	4.81 33	— —	— —	0.03 32
gen-w26-h11-rep4.sdvstp	0.02 37	94.77 37	— —	60.37 37	0.02 38	9.20 41	— —	— —	0.02 38

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w26-h11-rep5.sdvstp	0.02 48	0.03 48	— —	— —	0.02 48	16.29 52	— —	— —	0.02 48
gen-w26-h14-rep1.sdvstp	0.02 52	0.04 52	— —	— —	0.02 55	41.68 58	— —	— —	0.02 55
gen-w26-h14-rep2.sdvstp	0.10 44	5.97 44	— —	— —	0.10 44	38.55 46	— —	— —	0.09 44
gen-w26-h14-rep3.sdvstp	0.03 44	— —	— —	— —	0.03 45	18.26 46	— —	— —	0.02 45
gen-w26-h14-rep4.sdvstp	0.04 45	— —	— —	— —	0.03 47	51.75 50	— —	— —	0.03 46
gen-w26-h14-rep5.sdvstp	0.02 47	0.04 47	— —	— —	0.03 49	27.26 48	— —	— —	0.02 47
gen-w26-h18-rep1.sdvstp	0.11 58	— —	— —	— —	— —	49.64 62	— —	— —	— —
gen-w26-h18-rep2.sdvstp	0.14 54	— —	— —	— —	— —	84.74 59	— —	— —	— —
gen-w26-h18-rep3.sdvstp	0.06 57	0.04 57	— —	— —	0.06 60	113.22 61	— —	— —	0.06 59
gen-w26-h18-rep4.sdvstp	0.05 53	— —	— —	— —	— —	123.66 58	— —	— —	— —
gen-w26-h18-rep5.sdvstp	0.08 55	130.95 55	— —	— —	0.06 58	145.53 61	— —	— —	0.06 58
gen-w26-h23-rep1.sdvstp	0.16 73	— —	— —	— —	— —	— —	— —	— —	— —
gen-w26-h23-rep2.sdvstp	0.15 74	— —	— —	— —	0.15 74	— —	— —	— —	0.14 74
gen-w26-h23-rep3.sdvstp	0.31 66	51.42 66	— —	— —	0.26 67	199.21 70	— —	— —	0.26 67
gen-w26-h23-rep4.sdvstp	0.09 79	7.71 79	— —	— —	— —	— —	— —	— —	— —
gen-w26-h23-rep5.sdvstp	0.69 80	29.44 80	— —	— —	0.73 81	— —	— —	— —	0.76 81
gen-w26-h3-rep1.sdvstp	0.02 10	0.02 10	0.01 10	0.01 10	0.02 10	0.13 10	0.62 10	— —	0.01 26
gen-w26-h3-rep2.sdvstp	0.02 17	0.01 17	0.01 17	0.01 17	0.02 17	0.36 17	— —	— —	0.01 40
gen-w26-h3-rep3.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.10 11	2.25 11	— —	0.01 23
gen-w26-h3-rep4.sdvstp	0.02 9	0.01 9	0.01 9	0.01 9	0.02 9	0.08 9	0.87 9	— —	0.01 24
gen-w26-h3-rep5.sdvstp	0.02 11	0.02 11	0.01 11	0.02 11	0.02 11	0.11 11	1.59 11	— —	0.01 29
gen-w26-h4-rep1.sdvstp	0.03 16	0.02 16	0.02 16	0.01 16	0.03 16	0.43 17	— —	— —	0.01 40
gen-w26-h4-rep2.sdvstp	0.03 20	0.02 20	0.02 20	0.04 20	0.03 20	0.60 21	— —	— —	0.01 54
gen-w26-h4-rep3.sdvstp	0.03 13	0.47 13	0.01 13	0.01 13	0.03 13	0.22 15	8.80 13	— —	0.01 36
gen-w26-h4-rep4.sdvstp	0.02 17	0.02 17	0.02 17	0.02 17	0.02 17	0.27 17	— —	— —	0.01 50
gen-w26-h4-rep5.sdvstp	0.03 20	0.02 20	0.02 20	0.02 20	0.03 20	0.40 20	— —	— —	0.01 51
gen-w26-h5-rep1.sdvstp	0.05 24	0.04 24	2.01 24	0.67 24	0.04 24	1.53 25	— —	— —	0.01 85
gen-w26-h5-rep2.sdvstp	0.04 22	0.02 22	0.40 22	0.10 22	0.04 22	0.97 24	— —	— —	0.01 81
gen-w26-h5-rep3.sdvstp	0.05 21	0.03 21	0.06 21	0.04 21	0.05 21	1.07 21	— —	— —	0.01 61
gen-w26-h5-rep4.sdvstp	0.04 21	0.02 21	0.02 21	0.02 21	0.04 21	0.65 21	— —	— —	0.01 53
gen-w26-h5-rep5.sdvstp	0.04 21	0.02 21	0.03 21	0.02 21	0.04 21	0.93 21	— —	— —	0.01 67
gen-w26-h6-rep1.sdvstp	0.05 26	0.02 26	0.04 26	0.02 26	0.05 26	2.05 27	— —	— —	0.01 65
gen-w26-h6-rep2.sdvstp	0.05 25	0.02 25	0.47 25	0.13 25	0.06 25	1.36 26	— —	— —	0.01 88
gen-w26-h6-rep3.sdvstp	0.04 23	0.02 23	0.01 23	0.02 23	0.04 23	0.80 23	— —	— —	0.01 51
gen-w26-h6-rep4.sdvstp	0.07 25	0.03 25	1.98 25	2.17 25	0.07 25	1.20 25	— —	— —	0.01 87
gen-w26-h6-rep5.sdvstp	0.05	0.06	0.15	0.21	0.06	0.25	—	—	0.01

continued on next page

Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	17	17	17	17	17	18	—	—	83
gen-w26-h7-rep1.sdvstp	0.08	0.02	0.59	0.11	0.07	1.17	—	—	0.01
	23	23	23	23	23	25	—	—	87
gen-w26-h7-rep2.sdvstp	0.07	0.02	0.18	0.04	0.07	1.07	—	—	0.01
	20	20	20	20	20	23	—	—	77
gen-w26-h7-rep3.sdvstp	0.09	0.02	1.78	0.76	0.09	1.90	—	—	0.01
	25	25	25	25	25	26	—	—	95
gen-w26-h7-rep4.sdvstp	0.08	0.02	0.12	0.06	0.09	1.27	—	—	0.01
	24	24	24	24	24	25	—	—	78
gen-w26-h7-rep5.sdvstp	0.07	0.02	0.84	0.19	0.09	0.46	—	—	0.01
	19	19	19	19	19	20	—	—	82
gen-w26-h9-rep1.sdvstp	0.02	0.02	21.56	2.58	0.02	3.94	—	—	0.02
	31	31	31	31	31	33	—	—	31
gen-w26-h9-rep2.sdvstp	0.02	0.02	34.96	0.79	0.02	5.93	—	—	0.02
	35	35	35	35	35	39	—	—	35
gen-w26-h9-rep3.sdvstp	0.02	0.02	117.97	23.95	0.02	5.46	—	—	0.02
	37	37	37	37	37	39	—	—	37
gen-w26-h9-rep4.sdvstp	0.02	0.02	12.61	2.38	0.02	4.18	—	—	0.02
	32	32	32	32	33	32	—	—	32
gen-w26-h9-rep5.sdvstp	0.02	0.02	29.36	2.11	0.02	2.94	—	—	0.02
	30	30	30	30	30	30	—	—	30
gen-w3-h3-rep1.sdvstp	0.01	0.01	0.01	—	0.01	0.08	0.01	0.03	0.01
	3	3	3	—	3	3	3	3	4
gen-w3-h3-rep2.sdvstp	0.01	0.01	0.02	—	0.01	0.08	0.01	0.02	0.01
	2	2	2	—	2	2	2	2	2
gen-w3-h3-rep3.sdvstp	0.01	0.01	0.01	—	0.01	0.08	0.01	0.02	0.01
	2	2	2	—	3	2	2	2	4
gen-w3-h3-rep4.sdvstp	0.01	0.01	0.01	—	0.01	0.08	0.01	—	0.01
	1	1	1	—	3	1	1	—	5
gen-w3-h3-rep5.sdvstp	0.01	0.01	0.01	—	0.01	0.08	0.01	0.03	0.01
	4	4	4	—	5	4	4	4	5
gen-w31-h11-rep1.sdvstp	0.11	87.87	—	—	0.06	23.12	—	—	0.06
	40	40	—	—	40	41	—	—	40
gen-w31-h11-rep2.sdvstp	0.03	—	—	—	0.04	21.62	—	—	0.03
	39	—	—	—	39	43	—	—	39
gen-w31-h11-rep3.sdvstp	0.03	0.07	—	—	0.03	31.10	—	—	0.03
	46	46	—	—	46	48	—	—	46
gen-w31-h11-rep4.sdvstp	0.03	0.04	—	—	0.03	4.66	—	—	0.03
	32	32	—	—	35	36	—	—	34
gen-w31-h11-rep5.sdvstp	0.03	0.03	—	—	0.02	22.08	—	—	0.03
	41	41	—	—	41	42	—	—	41
gen-w31-h14-rep1.sdvstp	0.03	0.03	—	—	0.03	73.11	—	—	0.03
	62	62	—	—	63	64	—	—	62
gen-w31-h14-rep2.sdvstp	0.04	0.47	—	—	0.04	37.79	—	—	0.04
	51	51	—	—	51	53	—	—	51
gen-w31-h14-rep3.sdvstp	0.03	0.15	—	—	0.03	143.74	—	—	0.03
	66	66	—	—	68	73	—	—	68
gen-w31-h14-rep4.sdvstp	0.05	14.89	—	—	0.04	76.02	—	—	0.04
	58	58	—	—	59	60	—	—	59
gen-w31-h14-rep5.sdvstp	0.12	—	—	—	0.17	46.49	—	—	0.18
	48	—	—	—	50	54	—	—	49
gen-w31-h18-rep1.sdvstp	0.06	164.75	—	—	0.05	—	—	—	0.05
	76	76	—	—	77	—	—	—	77
gen-w31-h18-rep2.sdvstp	0.05	—	—	—	0.05	—	—	—	0.05
	72	—	—	—	72	—	—	—	72
gen-w31-h18-rep3.sdvstp	0.06	47.76	—	—	0.06	—	—	—	0.06
	69	69	—	—	69	—	—	—	69
gen-w31-h18-rep4.sdvstp	0.18	58.97	—	—	—	—	—	—	—
	74	74	—	—	—	—	—	—	—
gen-w31-h18-rep5.sdvstp	0.04	2.99	—	—	0.04	—	—	—	0.04
	76	76	—	—	76	—	—	—	76
gen-w31-h23-rep1.sdvstp	0.75	—	—	—	0.63	—	—	—	0.65
	87	—	—	—	88	—	—	—	88
gen-w31-h23-rep2.sdvstp	1.51	—	—	—	1.30	—	—	—	1.34
	91	—	—	—	92	—	—	—	92
gen-w31-h23-rep3.sdvstp	0.21	—	—	—	—	—	—	—	—
	88	—	—	—	—	—	—	—	—
gen-w31-h23-rep4.sdvstp	0.65	21.68	—	—	0.74	—	—	—	0.74
	90	90	—	—	90	—	—	—	90
gen-w31-h23-rep5.sdvstp	0.38	—	—	—	0.37	—	—	—	0.38
	91	—	—	—	91	—	—	—	91

continued on next page

Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w31-h29-rep1.sdvstp	0.34 120	— —	— —	— —	0.62 123	— —	— —	— —	0.65 123
gen-w31-h29-rep2.sdvstp	0.32 110	— —	— —	— —	0.87 114	— —	— —	— —	0.72 114
gen-w31-h29-rep3.sdvstp	3.08 100	— —	— —	— —	9.85 103	— —	— —	— —	9.73 103
gen-w31-h29-rep4.sdvstp	0.83 106	— —	— —	— —	0.68 107	— —	— —	— —	0.72 107
gen-w31-h29-rep5.sdvstp	1.73 109	— —	— —	— —	2.93 115	— —	— —	— —	3.03 115
gen-w31-h3-rep1.sdvstp	0.02 15	0.02 15	0.02 15	0.02 15	0.03 15	0.21 15	158.24 15	— —	0.01 43
gen-w31-h3-rep2.sdvstp	0.02 20	0.02 20	0.01 20	0.01 20	0.02 20	0.28 20	— —	— —	0.01 30
gen-w31-h3-rep3.sdvstp	0.03 16	0.02 16	0.02 16	0.02 16	0.03 16	0.19 16	— —	— —	0.01 52
gen-w31-h3-rep4.sdvstp	0.04 16	0.02 16	0.02 16	0.02 16	0.03 16	0.17 16	— —	— —	0.01 40
gen-w31-h3-rep5.sdvstp	0.02 13	0.02 13	0.02 13	0.02 13	0.02 13	0.14 14	7.62 13	— —	0.01 41
gen-w31-h4-rep1.sdvstp	0.05 21	0.02 21	0.05 21	0.02 21	0.05 21	0.75 21	— —	— —	0.01 59
gen-w31-h4-rep2.sdvstp	0.04 20	0.03 20	0.04 20	0.05 20	0.04 20	0.50 21	— —	— —	0.01 61
gen-w31-h4-rep3.sdvstp	0.04 24	0.02 24	0.23 24	0.24 24	0.04 24	1.12 25	— —	— —	0.01 79
gen-w31-h4-rep4.sdvstp	0.04 17	0.02 17	0.05 17	0.03 17	0.04 17	0.34 20	— —	— —	0.01 58
gen-w31-h4-rep5.sdvstp	0.05 17	0.02 17	0.04 17	0.03 17	0.04 17	0.41 17	— —	— —	0.01 64
gen-w31-h5-rep1.sdvstp	0.07 22	0.02 22	0.13 22	0.03 22	0.06 22	0.52 22	— —	— —	0.01 65
gen-w31-h5-rep2.sdvstp	0.06 21	0.02 21	0.61 21	0.55 21	0.07 21	1.16 22	— —	— —	0.01 88
gen-w31-h5-rep3.sdvstp	0.07 23	0.02 23	1.94 23	0.40 23	0.07 23	1.99 26	— —	— —	0.01 76
gen-w31-h5-rep4.sdvstp	0.06 25	0.53 25	0.23 25	0.20 25	0.07 25	1.69 28	— —	— —	0.01 81
gen-w31-h5-rep5.sdvstp	0.08 23	0.02 23	0.26 23	0.30 23	0.08 23	1.00 24	— —	— —	0.01 90
gen-w31-h6-rep1.sdvstp	0.12 25	0.07 25	8.12 25	1.02 25	0.14 25	1.50 26	— —	— —	0.01 100
gen-w31-h6-rep2.sdvstp	0.10 28	0.03 28	2.64 28	0.56 28	0.11 28	1.90 29	— —	— —	0.01 112
gen-w31-h6-rep3.sdvstp	0.09 27	0.02 27	1.20 27	0.81 27	0.09 27	1.49 28	— —	— —	0.02 99
gen-w31-h6-rep4.sdvstp	0.10 31	0.02 31	37.70 31	10.69 31	0.10 31	2.65 32	— —	— —	0.01 110
gen-w31-h6-rep5.sdvstp	0.14 32	0.02 32	9.32 32	1.10 32	0.10 32	4.12 33	— —	— —	0.01 98
gen-w31-h7-rep1.sdvstp	0.02 35	0.02 35	3.28 35	0.62 35	0.02 35	3.87 35	— —	— —	0.02 35
gen-w31-h7-rep2.sdvstp	0.02 32	0.47 32	— —	— —	0.02 32	3.61 33	— —	— —	0.02 32
gen-w31-h7-rep3.sdvstp	0.02 36	0.02 36	9.02 36	22.28 36	0.02 36	6.22 37	— —	— —	0.02 36
gen-w31-h7-rep4.sdvstp	0.02 29	0.02 29	9.19 29	0.57 29	0.02 29	3.20 30	— —	— —	0.02 29
gen-w31-h7-rep5.sdvstp	0.02 34	0.02 34	120.84 34	39.32 34	0.02 34	9.33 38	— —	— —	0.02 34
gen-w31-h9-rep1.sdvstp	0.03 39	0.03 39	— —	— —	0.02 39	7.17 41	— —	— —	0.02 39
gen-w31-h9-rep2.sdvstp	0.02 33	0.07 33	— —	206.02 33	0.02 33	6.99 36	— —	— —	0.03 33
gen-w31-h9-rep3.sdvstp	0.02 40	0.04 40	— —	— —	0.02 40	18.79 42	— —	— —	0.02 40
gen-w31-h9-rep4.sdvstp	0.02 37	0.03 37	— —	92.22 37	0.02 37	5.60 40	— —	— —	0.02 37
gen-w31-h9-rep5.sdvstp	0.02 34	0.03 34	— —	— —	0.02 34	4.76 36	— —	— —	0.02 34
gen-w4-h3-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.01	0.05	0.02

continued on next page

Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	5	5	5	5	5	5	5	5	6
gen-w4-h3-rep2.sdvstp	0.01 4	0.01 4	0.01 4	— —	0.01 4	0.08 4	0.01 4	0.04 4	0.02 4
gen-w4-h3-rep3.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.04 4	0.01 6
gen-w4-h3-rep4.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.02 4	0.04 4	0.01 6
gen-w4-h3-rep5.sdvstp	0.01 3	0.02 3	0.01 3	— —	0.01 3	0.08 3	0.01 3	0.04 3	0.01 3
gen-w4-h4-rep1.sdvstp	0.01 2	0.01 2	0.01 2	0.01 2	0.01 2	0.08 2	0.01 2	0.07 2	0.01 3
gen-w4-h4-rep2.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.08 4	0.01 5
gen-w4-h4-rep3.sdvstp	0.01 3	0.01 3	0.01 3	0.01 3	0.01 3	0.07 3	0.01 3	0.08 3	0.01 4
gen-w4-h4-rep4.sdvstp	0.01 4	0.01 4	0.01 4	— —	0.01 5	0.10 4	0.01 4	0.08 4	0.01 8
gen-w4-h4-rep5.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.08 4	0.01 5
gen-w5-h3-rep1.sdvstp	0.01 3	0.01 3	0.01 3	0.02 3	0.01 4	0.08 3	0.01 3	0.05 3	0.01 6
gen-w5-h3-rep2.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.07 4	0.01 5
gen-w5-h3-rep3.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.07 6	0.02 6	0.09 6	0.01 7
gen-w5-h3-rep4.sdvstp	0.02 2	0.01 2	0.01 2	0.01 2	0.02 2	0.08 2	0.01 2	0.06 2	0.01 3
gen-w5-h3-rep5.sdvstp	0.01 3	0.01 3	0.01 3	— —	0.01 3	0.07 3	0.02 3	0.06 3	0.01 3
gen-w5-h4-rep1.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.07 4	0.02 4	0.20 4	0.01 7
gen-w5-h4-rep2.sdvstp	0.01 3	0.01 3	0.01 3	0.01 3	0.01 4	0.08 3	0.07 3	0.13 3	0.01 9
gen-w5-h4-rep3.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.07 4	0.01 4	0.20 4	0.01 6
gen-w5-h4-rep4.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.18 4	0.01 13
gen-w5-h4-rep5.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.01 4	0.15 4	0.01 7
gen-w5-h5-rep1.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.09 5	0.02 4	0.40 4	0.01 14
gen-w5-h5-rep2.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.08 6	0.02 6	0.38 6	0.01 7
gen-w5-h5-rep3.sdvstp	0.01 4	0.02 4	0.01 4	0.01 4	0.01 5	0.08 5	0.02 4	0.35 4	0.01 9
gen-w5-h5-rep4.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.07 6	0.02 6	0.69 6	0.01 9
gen-w5-h5-rep5.sdvstp	0.02 3	0.01 3	0.01 3	0.01 3	0.01 4	0.08 4	0.01 3	0.28 3	0.01 16
gen-w6-h3-rep1.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.02 5	0.22 5	0.02 9
gen-w6-h3-rep2.sdvstp	0.01 4	0.01 4	0.01 4	— —	0.01 4	0.07 4	0.01 4	0.10 4	0.02 5
gen-w6-h3-rep3.sdvstp	0.01 6	0.01 6	0.01 6	— —	0.01 6	0.08 6	0.02 6	0.26 6	0.01 6
gen-w6-h3-rep4.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.01 5	0.15 5	0.01 7
gen-w6-h3-rep5.sdvstp	0.01 4	0.02 4	0.01 4	— —	0.01 4	0.12 4	0.01 4	0.10 4	0.01 5
gen-w6-h4-rep1.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.10 8	0.05 8	4.43 8	0.02 10
gen-w6-h4-rep2.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.08 6	0.03 6	0.71 6	0.01 9
gen-w6-h4-rep3.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 6	0.11 5	0.02 5	0.41 5	0.01 9
gen-w6-h4-rep4.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.09 5	0.02 5	0.29 5	0.01 10
gen-w6-h4-rep5.sdvstp	0.02 4	0.01 4	0.01 4	0.01 4	0.01 4	0.08 4	0.02 4	0.35 4	0.01 12
gen-w6-h5-rep1.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 7	0.08 7	0.05 7	11.04 7	0.01 11

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w6-h5-rep2.sdvstp	0.01 6	0.02 6	0.01 6	0.01 6	0.01 6	0.08 6	0.03 6	1.53 6	0.01 11
gen-w6-h5-rep3.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 7	0.08 7	0.05 7	2.97 7	0.09 9
gen-w6-h5-rep4.sdvstp	0.01 4	0.02 4	0.01 4	0.02 4	0.01 4	0.08 4	0.02 4	0.75 4	0.01 10
gen-w6-h5-rep5.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.09 5	0.96 5	0.01 12
gen-w6-h6-rep1.sdvstp	0.01 7	0.01 7	0.01 7	0.02 7	0.01 7	0.09 8	0.07 7	27.64 7	0.01 12
gen-w6-h6-rep2.sdvstp	0.01 4	0.01 4	0.01 4	— —	0.01 7	0.08 4	0.02 4	0.82 4	0.01 11
gen-w6-h6-rep3.sdvstp	0.01 6	0.01 6	0.01 6	— —	0.01 6	0.08 6	0.03 6	1.54 6	0.01 13
gen-w6-h6-rep4.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 9	0.08 8	0.14 8	32.28 8	0.01 12
gen-w6-h6-rep5.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 9	0.08 7	0.08 7	18.42 7	0.01 15
gen-w7-h3-rep1.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.02 5	0.20 5	0.01 6
gen-w7-h3-rep2.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.08 5	0.02 5	0.27 5	0.01 8
gen-w7-h3-rep3.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.07 4	0.01 4	0.22 4	0.01 10
gen-w7-h3-rep4.sdvstp	0.01 3	0.01 3	0.01 3	— —	0.01 3	0.07 3	0.01 3	0.14 3	0.01 3
gen-w7-h3-rep5.sdvstp	0.01 5	0.01 5	0.01 5	— —	0.01 5	0.12 5	0.01 5	0.17 5	0.01 5
gen-w7-h4-rep1.sdvstp	0.01 7	0.01 7	0.01 7	0.01 7	0.01 8	0.08 7	0.06 7	1.75 7	0.01 13
gen-w7-h4-rep2.sdvstp	0.01 3	0.01 3	0.01 3	0.01 3	0.01 3	0.10 3	0.02 3	0.31 3	0.01 4
gen-w7-h4-rep3.sdvstp	0.01 9	0.01 9	0.01 9	0.01 9	0.01 9	0.09 10	0.28 9	170.51 9	0.01 15
gen-w7-h4-rep4.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.01 4	0.10 4	0.02 4	0.50 4	0.01 7
gen-w7-h4-rep5.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.11 6	0.03 5	0.57 5	0.01 11
gen-w7-h5-rep1.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.01 8	0.08 8	0.08 8	26.84 8	0.01 12
gen-w7-h5-rep2.sdvstp	0.01 5	0.01 5	0.01 5	0.04 5	0.01 5	0.11 5	0.03 5	1.08 5	0.01 14
gen-w7-h5-rep3.sdvstp	0.01 9	0.01 9	0.02 9	0.01 9	0.01 10	0.10 9	0.16 9	153.71 9	0.01 11
gen-w7-h5-rep4.sdvstp	0.01 5	0.01 5	0.01 5	0.01 5	0.01 5	0.09 5	0.03 5	1.15 5	0.01 10
gen-w7-h5-rep5.sdvstp	0.01 4	0.01 4	0.01 4	0.01 4	0.02 4	0.08 4	0.02 4	1.00 4	0.01 12
gen-w7-h6-rep1.sdvstp	0.01 6	0.01 6	0.02 6	0.02 6	0.02 7	0.08 6	0.04 6	2.32 6	0.01 11
gen-w7-h6-rep2.sdvstp	0.01 10	0.01 10	0.01 10	0.01 10	0.01 10	0.09 11	0.25 10	— —	0.01 20
gen-w7-h6-rep3.sdvstp	0.01 3	0.01 3	0.01 3	0.01 3	0.01 3	0.10 3	0.02 3	1.04 3	0.01 9
gen-w7-h6-rep4.sdvstp	0.02 7	0.01 7	0.01 7	0.01 7	0.02 9	0.11 8	0.18 7	43.75 7	0.01 26
gen-w7-h6-rep5.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.01 6	0.08 6	0.04 6	3.47 6	0.01 11
gen-w7-h7-rep1.sdvstp	0.02 8	0.01 8	0.01 8	0.01 8	0.01 8	0.09 9	0.18 8	— —	0.01 25
gen-w7-h7-rep2.sdvstp	0.01 6	0.01 6	0.01 6	0.01 6	0.02 6	0.11 6	0.08 6	8.91 6	0.01 15
gen-w7-h7-rep3.sdvstp	0.01 11	0.01 11	0.01 11	0.01 11	0.02 11	0.13 11	0.59 11	— —	0.01 26
gen-w7-h7-rep4.sdvstp	0.02 8	0.02 8	0.01 8	0.01 8	0.02 8	0.08 9	0.26 8	— —	0.01 19
gen-w7-h7-rep5.sdvstp	0.02 8	0.02 8	0.01 8	0.02 8	0.02 8	0.09 8	0.51 8	— —	0.01 26
gen-w8-h3-rep1.sdvstp	0.01 2	0.01 2	0.01 2	0.01 2	0.01 3	0.08 2	0.01 2	0.20 2	0.01 6
gen-w8-h3-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.02	0.51	0.01

continued on next page

Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
	6	6	6	6	6	6	6	6	9
gen-w8-h3-rep3.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.03	0.37	0.01
	6	6	6	6	6	6	6	6	7
gen-w8-h3-rep4.sdvstp	0.01	0.01	0.01	0.01	0.02	0.12	0.02	0.56	0.01
	5	5	5	5	5	5	5	5	12
gen-w8-h3-rep5.sdvstp	0.02	0.01	0.01	0.01	0.01	0.08	0.01	0.40	0.01
	5	5	5	5	5	5	5	5	9
gen-w8-h4-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.21	248.53	0.01
	9	9	9	9	9	9	9	9	16
gen-w8-h4-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.12	261.38	0.01
	9	9	9	9	9	10	9	9	15
gen-w8-h4-rep3.sdvstp	0.10	0.02	0.01	0.01	0.01	0.07	0.02	0.47	0.01
	3	3	3	3	3	3	3	3	4
gen-w8-h4-rep4.sdvstp	0.01	0.01	0.09	0.01	0.01	0.08	0.03	1.10	0.01
	6	6	6	6	6	6	6	6	12
gen-w8-h4-rep5.sdvstp	0.01	0.01	0.01	0.02	0.01	0.08	0.03	7.30	0.01
	7	7	7	7	7	7	7	7	12
gen-w8-h5-rep1.sdvstp	0.01	0.01	0.01	0.01	0.02	0.07	0.03	2.24	0.01
	5	5	5	5	5	5	5	5	16
gen-w8-h5-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.09	0.24	—	0.01
	10	10	10	10	10	10	10	—	16
gen-w8-h5-rep3.sdvstp	0.01	0.01	0.02	0.01	0.01	0.08	0.06	4.36	0.01
	6	6	6	6	7	6	6	6	18
gen-w8-h5-rep4.sdvstp	0.02	0.01	0.01	0.01	0.02	0.08	0.17	—	0.01
	8	8	8	8	8	8	8	—	16
gen-w8-h5-rep5.sdvstp	0.01	0.02	0.01	0.02	0.01	0.08	0.05	7.31	0.01
	6	6	6	6	6	6	6	6	21
gen-w8-h6-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.10	0.68	—	0.01
	11	11	11	11	11	12	11	—	20
gen-w8-h6-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.15	187.48	0.01
	8	8	8	8	8	8	8	8	13
gen-w8-h6-rep3.sdvstp	0.02	0.02	0.01	0.02	0.02	0.08	0.05	36.40	0.01
	6	6	6	6	6	6	6	6	17
gen-w8-h6-rep4.sdvstp	0.02	0.01	0.01	0.01	0.01	0.08	0.27	—	0.01
	9	9	9	9	9	9	9	—	25
gen-w8-h6-rep5.sdvstp	0.01	0.02	0.01	0.01	0.01	0.11	0.50	—	0.01
	11	11	11	11	11	11	11	—	24
gen-w8-h7-rep1.sdvstp	0.02	0.01	0.01	0.01	0.02	0.08	0.09	—	0.01
	8	8	8	8	8	8	8	—	16
gen-w8-h7-rep2.sdvstp	0.02	0.01	0.01	0.01	0.02	0.08	0.33	—	0.01
	8	8	8	8	8	8	8	—	20
gen-w8-h7-rep3.sdvstp	0.02	0.01	0.01	0.01	0.02	0.16	1.34	—	0.01
	11	11	11	11	11	11	11	—	25
gen-w8-h7-rep4.sdvstp	0.02	0.01	0.02	0.02	0.02	0.13	2.40	—	0.01
	11	11	11	11	11	12	11	—	37
gen-w8-h7-rep5.sdvstp	0.02	0.02	0.01	0.01	0.02	0.08	0.17	—	0.01
	8	8	8	8	8	8	8	—	21
gen-w9-h3-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.13	0.02	1.52	0.01
	6	6	6	6	6	6	6	6	13
gen-w9-h3-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.14	4.03	0.02
	8	8	8	8	8	8	8	8	11
gen-w9-h3-rep3.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.04	0.85	0.01
	5	5	5	5	5	6	5	5	13
gen-w9-h3-rep4.sdvstp	0.02	0.01	0.01	0.01	0.01	0.09	0.03	1.57	0.01
	7	7	7	7	7	7	7	7	10
gen-w9-h3-rep5.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.02	0.52	0.01
	4	4	4	4	4	4	4	4	14
gen-w9-h4-rep1.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.05	2.48	0.01
	6	6	6	6	7	6	6	6	14
gen-w9-h4-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.10	0.03	3.60	0.01
	6	6	6	6	6	6	6	6	11
gen-w9-h4-rep3.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.07	7.02	0.01
	7	7	7	7	8	8	7	7	15
gen-w9-h4-rep4.sdvstp	0.01	0.01	0.01	0.02	0.01	0.07	0.03	1.14	0.01
	5	5	5	5	5	5	5	5	8
gen-w9-h4-rep5.sdvstp	0.01	0.01	0.01	0.01	0.02	0.11	0.48	—	0.01
	10	10	10	10	10	10	10	—	21
gen-w9-h5-rep1.sdvstp	0.02	0.01	0.01	0.01	0.01	0.08	0.22	—	0.01
	9	9	9	9	9	9	9	—	19
gen-w9-h5-rep2.sdvstp	0.01	0.01	0.01	0.01	0.01	0.08	0.12	98.33	0.01
	8	8	8	8	8	8	8	8	16

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Table 2: runtime and k per instance (continued)

Instance	karl3	lucas	vsevolod	lennart	karl2	jean	jonas	pascal	karl
gen-w9-h5-rep3.sdvstp	0.01 8	0.02 8	0.01 8	0.01 8	0.02 8	0.08 8	0.18 8	– –	0.01 23
gen-w9-h5-rep4.sdvstp	0.01 5	0.01 5	0.01 5	0.02 5	0.01 6	0.08 5	0.03 5	2.01 5	0.01 13
gen-w9-h5-rep5.sdvstp	0.01 8	0.01 8	0.01 8	0.01 8	0.02 8	0.08 8	0.25 8	– –	0.02 16
gen-w9-h6-rep1.sdvstp	0.01 8	0.01 8	0.02 8	0.01 8	0.02 8	0.08 8	0.27 8	– –	0.01 16
gen-w9-h6-rep2.sdvstp	0.02 9	0.01 9	0.01 9	0.01 9	0.01 10	0.09 9	0.31 9	– –	0.01 22
gen-w9-h6-rep3.sdvstp	0.02 14	0.01 14	0.01 14	0.01 14	0.02 14	0.16 14	27.37 14	– –	0.01 22
gen-w9-h6-rep4.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.10 11	1.11 11	– –	0.01 23
gen-w9-h6-rep5.sdvstp	0.02 11	0.01 11	0.01 11	0.01 11	0.02 11	0.10 11	0.65 11	– –	0.01 19
gen-w9-h7-rep1.sdvstp	0.02 11	0.02 11	0.02 11	0.02 11	0.02 11	0.10 12	1.51 11	– –	0.02 35
gen-w9-h7-rep2.sdvstp	0.02 11	0.02 11	0.01 11	0.01 11	0.02 11	0.10 11	1.46 11	– –	0.01 22
gen-w9-h7-rep3.sdvstp	0.02 12	0.02 12	0.01 12	0.01 12	0.02 12	0.13 13	5.39 12	– –	0.01 33
gen-w9-h7-rep4.sdvstp	0.02 13	0.01 13	0.01 13	0.01 13	0.02 13	0.14 13	5.36 13	– –	0.01 38
gen-w9-h7-rep5.sdvstp	0.02 11	0.02 11	0.02 11	0.02 11	0.02 11	0.10 11	1.67 11	– –	0.01 38
gen-w9-h9-rep1.sdvstp	0.02 10	0.02 10	0.01 10	0.01 10	0.02 10	0.23 11	2.07 10	– –	0.01 30
gen-w9-h9-rep2.sdvstp	0.02 16	0.01 16	0.02 16	0.02 16	0.02 16	0.19 17	– –	– –	0.01 38
gen-w9-h9-rep3.sdvstp	0.02 13	0.02 13	0.01 13	0.01 13	0.02 13	0.13 13	7.88 13	– –	0.01 31
gen-w9-h9-rep4.sdvstp	0.02 13	0.02 13	0.03 13	0.04 13	0.02 13	0.21 14	41.29 13	– –	0.01 53
gen-w9-h9-rep5.sdvstp	0.02 17	0.02 17	0.01 17	0.01 17	0.02 17	0.19 17	– –	– –	0.01 37