Submitted by Aravind Ravindranath

Table 1 Runtime measurements of sort algorithms based on data files in Input Folder

Size of Data	Runtime in	Sorting	GAP SEQUENCE	File Name in
Jize or bata	nano secs	Algorithm(H,	for Shell Sort	Input Folder
	1010 3003	S or I)	701 011011 0011	I i i pate i oi doi
10000	49921766157	H		asc10K. dat
10000	1025922	S	{1, 4, 13, 40,	asc10K. dat
	<u> </u>		121, 364,	
			1093, 3280,	
			9841, 29524}	
10000	626978	S	{1, 5, 17, 53,	asc10K. dat
			149, 373,	
			1123, 3371,	
10000	22/247	C	10111, 30341}	000101/ -1-1
10000	226247	S	{1, 10, 30,	asc10K. dat
			60, 120, 360,	
			1080, 3240,	
10000	219553	S	9720, 29160} {1, 7, 19, 67,	asc10K. dat
10000	217000	3	131, 371,	ascion, uat
			1211, 3353,	
			9851, 29651}	
10000	121825	S	{1, 3, 23, 71,	asc10K. dat
	1 - 1		143, 379,	
			1237, 3413,	
			10433, 31001}	
10000	287830	ı		asc10K. dat
1000	54925900	Н		asc1K. dat
1000	12495	S	{1, 4, 13, 40,	asc1K. dat
			121, 364,	
			1093, 3280,	
1000	11/02	C	9841, 29524}	2021/ d=±
1000	11603	S	{1, 5, 17, 53,	asc1K. dat
			149, 373, 1123, 3371,	
			10111, 30341}	
1000	12049	S	{1, 10, 30,	asc1K. dat
1000	12077	3	60, 120, 360,	ascin. dat
			1080, 3240,	
			9720, 29160}	
1000	16958	S	{1, 7, 19, 67,	asc1K. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
1000	12049	S	{1, 3, 23, 71,	asc1K. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
1000	29452	1		asc1K. dat
20000	462838891343	Н	(4 4 10 10	asc20K. dat
20000	401623	S	{1, 4, 13, 40,	asc20K. dat
			121, 364,	

		<u> </u>	14000 0000	T
			1093, 3280, 9841, 29524}	
20000	379756	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	asc20K.dat
20000	618052	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	asc20K. dat
20000	623408	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	asc20K. dat
20000	1458783	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	asc20K. dat
20000	1266896	1		asc20K. dat
2000	754771053	Н		asc2K. dat
2000	62029	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	asc2K.dat
2000	67830	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	asc2K. dat
2000	66491	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	asc2K. dat
2000	68276	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	asc2K. dat
2000	418580	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	asc2K.dat
2000	102637	1		asc2K. dat
50	37485	Н		asc50. dat
50	4463	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	asc50. dat
50	2231	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	asc50. dat
50	2232	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	asc50. dat

F0	242/1	6	(4 7 40 /7	FO -1-+
50	34361	S	{1, 7, 19, 67,	asc50. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
50	9371	S	{1, 3, 23, 71,	asc50. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
50	4462	I		asc50. dat
500	15390177	Н		asc500. dat
500	18743	S	{1, 4, 13, 40,	asc500. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
500	18296	S	{1, 5, 17, 53,	asc500. dat
			149, 373,	
			1123, 3371,	
			10111, 30341}	
500	18296	S	{1, 10, 30,	asc500. dat
			60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
500	27221	S	{1, 7, 19, 67,	asc500. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
500	18296	S	{1, 3, 23, 71,	asc500. dat
	1.52.5		143, 379,	
			1237, 3413,	
			10433, 31001}	
500	27667			asc500. dat
5000	8370637375	Н		asc5K. dat
5000	91927	S	{1, 4, 13, 40,	asc5K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
5000	85233	S	{1, 5, 17, 53,	asc5K. dat
-		-	149, 373,	
			1123, 3371,	
			10111, 30341}	
5000	84340	S	{1, 10, 30,	asc5K. dat
			60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
5000	87465	S	{1, 7, 19, 67,	asc5K. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
5000	93266	S	{1, 3, 23, 71,	asc5K. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
5000	153509	I		asc5K. dat
10000	63316020278	Н		dup10K. dat
			i e e e e e e e e e e e e e e e e e e e	i 1

10000	3415576	S	{1, 4, 13, 40,	dup10K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
10000	1104908	S	{1, 5, 17, 53,	dup10K. dat
			149, 373,	
			1123, 3371,	
			10111, 30341}	
10000	2339229	S	{1, 10, 30,	dup10K. dat
			60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
10000	1080811	S	{1, 7, 19, 67,	dup10K. dat
10000	1000011	3	131, 371,	dup fok. dat
			1211, 3353,	
10000	1024504	S	9851, 29651}	dup10K. dat
10000	1024584	3	{1, 3, 23, 71,	aup rok. da t
			143, 379,	
			1237, 3413,	
			10433, 31001}	
10000	55029877	Ī		dup10K. dat
1000	56080342	Н		dup1K. dat
1000	79432	S	{1, 4, 13, 40,	dup1K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
1000	67830	S	{1, 5, 17, 53,	dup1K. dat
			149, 373,	
			1123, 3371,	
			10111, 30341}	
1000	96836	S	{1, 10, 30,	dup1K. dat
	1.5555		60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
1000	69168	S	{1, 7, 19, 67,	dup1K. dat
1000	07100	3	131, 371,	dup ik. dat
			1211, 3353,	
1000	45500	S	9851, 29651}	dun1V do+
1000	65599	3	{1, 3, 23, 71,	dup1K. dat
			143, 379,	
			1237, 3413,	
1000	005405	1	10433, 31001}	de a división de la constantidad
1000	905435	1		dup1K. dat
20000	588534034388	Н		dup20K. dat
20000	2895698	S	{1, 4, 13, 40,	dup20K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
20000	2673468	S	{1, 5, 17, 53,	dup20K. dat
			149, 373,	
			1123, 3371,	
			10111, 30341}	
20000	7789246	S	{1, 10, 30,	dup20K. dat
			60, 120, 360,	'
		i		ì

			1000 2240	-1
			1080, 3240, 9720, 29160}	
20000	2585111	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	dup20K. dat
20000	2859999	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	dup20K. dat
20000	297876309			dup20K. dat
2000	649443307	Н		dup2K. dat
2000	847424	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	dup2K. dat
2000	237850	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	dup2K. dat
2000	372170	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160} {1, 7, 19, 67,	dup2K. dat
2000	228925	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	dup2K. dat
2000	240974	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	dup2K. dat
2000	1459675	1	·	dup2K. dat
50	34362	Н		dup50. dat
50	4463	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	dup50. dat
50	2678	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	dup50. dat
50	1785	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	dup50. dat
50	2232	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	dup50. dat
50	1785	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	dup50. dat

50	1785	I		dup50. dat
500	11714884	Н		dup500. dat
500	37484	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	dup500.dat
500	36146	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	dup500. dat
500	45071	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	dup500. dat
500	35699	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	dup500. dat
500	34808	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	dup500. dat
500	64260	1		dup500. dat
5000	10393178664	Н		dup5K. dat
5000	564502	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	dup5K.dat
5000	5332655	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	dup5K.dat
5000	5744541	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	dup5K. dat
5000	696592	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	dup5K. dat
5000	808600	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	dup5K. dat
5000	8622836	1		dup5K. dat
10000	67329968183	Н	(1 4 10 10	ran10K. dat
10000	1191926	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	ran10K. dat
10000	1105801	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	ran10K. dat

10000	2604299	S	{1, 10, 30,	ran10K. dat
10000	2004277		60, 120, 360,	rannok. dat
			1080, 3240,	
			9720, 29160}	
10000	2951034	S	{1, 7, 19, 67,	ran10K. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
10000	1701095	S	{1, 3, 23, 71,	ran10K. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
10000	44726027	1		ran10K. dat
1001	85040006	Н	_	ran1K. dat
1001	77647	S	{1, 4, 13, 40,	ran1K. dat
			121, 364,	
			1093, 3280,	
1001	70700		9841, 29524}	41/
1001	72738	S	{1, 5, 17, 53,	ran1K. dat
			149, 373,	
			1123, 3371,	
1001	89250	S	10111, 30341} {1, 10, 30,	ran1K. dat
1001	89250	3	60, 120, 360,	Tallik. Uat
			1080, 3240,	
			9720, 29160}	
1001	76308	S	{1, 7, 19, 67,	ran1K. dat
1001	70300	3	131, 371,	rannik. dat
			1211, 3353,	
			9851, 29651}	
1001	72292	S	{1, 3, 23, 71,	ran1K. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
1001	214199	1		ran1K. dat
20000	483910691192	Н		ran20K. dat
20000	2537362	S	{1, 4, 13, 40,	ran20K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	0.01/. 1 .
20000	2384299	S	{1, 5, 17, 53,	ran20K. dat
			149, 373,	
			1123, 3371,	
20000	E40010F	S	10111, 30341}	ran201/ dat
20000	5499105	3	{1, 10, 30,	ran20K. dat
			60, 120, 360, 1080, 3240,	
			9720, 29160}	
20000	2890790	S	{1, 7, 19, 67,	ran20K. dat
20000	20,01,0		131, 371,	. diizok. dat
			1211, 3353,	
			9851, 29651}	
20000	2878741	S	{1, 3, 23, 71,	ran20K. dat
			143, 379,	
	•		•	

			1237, 3413,	1
			10433, 31001}	
20000	97193551	1	10100, 01001)	ran20K. dat
2000	453627767	H		ran2K. dat
2000	189655	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	ran2K. dat
2000	172251	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	ran2K. dat
2000	261501	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	ran2K. dat
2000	171805	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	ran2K. dat
2000	178052	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	ran2K. dat
2000	900974	1		ran2K. dat
50	29898	Н		ran50. dat
50	3570	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	ran50. dat
50	2678	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	ran50. dat
50	2677	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	ran50. dat
50	2231	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	ran50. dat
50	2677	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	ran50. dat
50	2678	1		ran50. dat
500	9655453	Н		ran500. dat
500	33915	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	ran500. dat
500	34808	S	{1, 5, 17, 53, 149, 373,	ran500. dat

			1100 0071	
			1123, 3371, 10111, 30341}	
500	37931	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	ran500. dat
500	34807	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	ran500. dat
500	33022	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	ran500.dat
500	58458	I		ran500. dat
5000	5453122616	Н		ran5K. dat
5000	601095	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	ran5K. dat
5000	572981	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	ran5K. dat
5000	1069655	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	ran5K. dat
5000	488640	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	ran5K.dat
5000	481947	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	ran5K.dat
5000	5686083	I		ran5K. dat
10000	41259011295	Н		rev10K. dat
10000	297200	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	rev10K. dat
10000	273550	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	rev10K. dat
10000	269088	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	rev10K. dat
10000	350305	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	rev10K. dat

10000	299432	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	rev10K. dat
10000	49322373	1		rev10K. dat
1000	43177548	Н		rev1K. dat
1000	23651	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	rev1K. dat
1000	24098	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	rev1K. dat
1000	26328	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	rev1K. dat
1000	23651	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	rev1K. dat
1000	25882	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	rev1K. dat
1000	449817	1		rev1K. dat
20000	367306954764	Н		rev20K. dat
20000	1073225	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	rev20K. dat
20000	1074118	S	{1, 5, 17, 53, 149, 373, 1123, 3371, 10111, 30341}	rev20K. dat
20000	1231196	S	{1, 10, 30, 60, 120, 360, 1080, 3240, 9720, 29160}	rev20K. dat
20000	1160689	S	{1, 7, 19, 67, 131, 371, 1211, 3353, 9851, 29651}	rev20K. dat
20000	1172738	S	{1, 3, 23, 71, 143, 379, 1237, 3413, 10433, 31001}	rev20K. dat
20000	206778496	1		rev20K. dat
2000	421883521	Н		rev2K. dat
2000	44625	S	{1, 4, 13, 40, 121, 364, 1093, 3280, 9841, 29524}	rev2K. dat

2000	53549	S	{1, 5, 17, 53, 149, 373,	rev2K. dat
			149, 373, 1123, 3371,	
			10111, 30341}	
2000	53549	S	{1, 10, 30,	rev2K. dat
2000	00017		60, 120, 360,	101211. dat
			1080, 3240,	
			9720, 29160}	
2000	49534	S	{1, 7, 19, 67,	rev2K. dat
			131, 371,	
			1211, 3353,	
2000	40441	S	9851, 29651}	rev2K. dat
2000	48641	3	{1, 3, 23, 71, 143, 379,	Tevzk. uat
			1237, 3413,	
			10433, 31001}	
2000	1690384	I		rev2K. dat
50	17850	Н		rev50. dat
50	1339	S	{1, 4, 13, 40,	rev50. dat
			121, 364,	
			1093, 3280,	
F.0	4000		9841, 29524}	F0 1 1
50	1339	S	{1, 5, 17, 53,	rev50. dat
			149, 373, 1123, 3371,	
			10111, 30341}	
50	1338	S	{1, 10, 30,	rev50. dat
			60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
50	893	S	{1, 7, 19, 67,	rev50. dat
			131, 371,	
			1211, 3353, 9851, 29651}	
50	1339	S	{1, 3, 23, 71,	rev50. dat
	1007		143, 379,	10000. dat
			1237, 3413,	
			10433, 31001}	
50	2231	1		rev50. dat
500	5470099	Н	(4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rev500. dat
500	11602	S	{1, 4, 13, 40,	rev500. dat
			121, 364, 1093, 3280,	
			9841, 29524}	
500	12049	S	{1, 5, 17, 53,	rev500. dat
	1.20.7		149, 373,	
			1123, 3371,	
			10111, 30341}	
500	12049	S	{1, 10, 30,	rev500. dat
			60, 120, 360,	
			1080, 3240,	
500	11157	S	9720, 29160} {1, 7, 19, 67,	rev500. dat
300	11137	3	131, 371,	i evolu. uat
			101, 0/1,	

			1011 2050	
			1211, 3353,	
			9851, 29651}	
500	11603	S	{1, 3, 23, 71,	rev500. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
500	107992	I		rev500. dat
5000	6340627691	Н		rev5K. dat
5000	417242	S	{1, 4, 13, 40,	rev5K. dat
			121, 364,	
			1093, 3280,	
			9841, 29524}	
5000	228925	S	{1, 5, 17, 53,	rev5K. dat
			149, 373,	
			1123, 3371,	
			10111, 30341}	
5000	374848	S	{1, 10, 30,	rev5K. dat
			60, 120, 360,	
			1080, 3240,	
			9720, 29160}	
5000	229371	S	{1, 7, 19, 67,	rev5K. dat
			131, 371,	
			1211, 3353,	
			9851, 29651}	
5000	236958	S	{1, 3, 23, 71,	rev5K. dat
			143, 379,	
			1237, 3413,	
			10433, 31001}	
5000	15519588	1		rev5K. dat