



Systems Reference Library

Comparison of Sort 2-Version 2 Timing IBM 1401 and IBM 1460 Data Processing Systems

This publication contains 72 sort timing comparison tables of the Sort 2 — Version 2 program run on an IBM 1401 Data Processing System and an IBM 1460 Data Processing System.

This program, when used with a 1460 system, results in an appreciable savings in sort run time.

The various parameters involved are explained in the introduction of the publication.

COMPARISON OF SORT 2-VERSION 2 TIMING — IBM 1401 AND IBM 1460 DATA PROCESSING SYSTEMS

With the announcement by IBM of the IBM 1460 Data Processing System, an appreciable savings in sort timing can be realized by the user. This publication contains sort timing comparison tables made by running the Sort 2 — Version 2 program on an IBM 1401 Data Processing System and an IBM 1460 Data Processing System.

The sort timing estimates are for 4-tape and 6-tape sorts using the balanced Phase 2 method and 4-tape sorts using the multiphase method of merging in Phase 2. The parameters involved are:

- * Core-storage capacity — 8,000; 12,000; and 16,000 positions
- * Magnetic tape units — 7330; 729-II; 729-IV; 729-V; and 729-VI (729-VI used with 1460 only)
- * Record size — 10, 20, 40, 80, 100, 200, 500, and 1000 characters
- * Input file size — 1000; 2000; 5000; 10,000; 25,000; 50,000; 75,000; and 100,000 records
- * Density — 556 characters per inch on 7330; 729-II; and 729-IV tape units.
800 characters per inch on 729-V and 729-VI tape units.

The number of control field characters used for each table is 10 characters.

COMPARISON TIMING TABLES

This section contains 48 comparison timing tables for 2-way and 3-way balanced merges, and 24 tables for multiphase merging. All of the parameters previously discussed have been used to compile these timing estimate tables. Also included are these three factors:

- G — the number of records sorted internally in Phase 1
- B — the sort blocking factor
- P — the number of Phase 2 merge passes

The timings shown have been rounded to the nearest full minute. In the tables with small record volume, the asterisk (*) indicates that this run was accomplished in less than one-half minute.

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	150	150	3
2000	1	1	1	1	1	1	1	1	1			4
5000	4	3	3	3	2	2	2	2	2			6
10000	8	7	7	7	5	4	4	4	4			7
25000	22	19	18	18	14	11	10	11	10			8
50000	47	41	39	40	31	25	23	23	22			9
75000	71	62	59	60	46	37	34	35	32			9
100000	103	89	85	86	68	54	49	50	47			10

2-WAY MERGE: Core storage capacity — 8K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	2	1	1	2	1	1	1	1	30	15	6
2000	6	4	3	3	5	3	2	3	2			7
5000	16	11	9	9	14	8	7	7	6			8
10000	36	24	19	20	31	19	15	16	12			9
25000	99	69	57	56	86	56	44	43	34			10
50000	216	136	113	122	188	108	85	94	75			11
75000	352	213	176	190	306	167	131	144	114			12
100000	469	278	231	248	408	217	170	187	148			12

2-WAY MERGE: Core storage capacity — 8K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	*	*	*	*	*	75	75	4
2000	2	1	1	1	1	1	1	1	1			5
5000	5	4	4	4	4	3	2	2	2			7
10000	11	9	8	8	8	6	5	5	5			8
25000	30	24	22	23	22	16	14	14	13			9
50000	67	53	48	49	48	35	30	31	28			10
75000	100	79	72	74	73	52	45	47	42			10
100000	144	114	104	107	105	75	65	68	60			11

2-WAY MERGE: Core storage capacity — 8K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	5	3	3	3	5	3	2	2	2	14	7	7
2000	12	8	6	6	11	6	5	5	4			8
5000	33	21	17	18	30	17	13	14	11			9
10000	74	46	37	39	66	38	29	32	24			10
25000	201	120	97	106	181	100	76	86	66			11
50000	437	244	196	214	393	200	152	170	131			12
75000	707	385	309	336	637	315	239	266	204			13
100000	942	508	407	443	849	415	314	349	267			13

2-WAY MERGE: Core storage capacity — 8K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	*	1	*	37	37	5
2000	3	2	2	2	2	1	1	1	1			6
5000	8	6	5	5	6	4	4	4	3			8
10000	18	13	11	12	14	9	8	8	7			9
25000	50	36	31	32	40	26	21	22	19			10
50000	108	78	68	70	86	56	46	49	41			11
75000	162	119	104	105	130	87	72	73	61			11
100000	233	166	146	154	187	120	100	108	91			12

2-WAY MERGE: Core storage capacity — 8K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	14	9	7	7	13	7	6	6	5	6	3	8
2000	31	19	15	16	29	16	12	13	10			9
5000	86	56	45	44	79	49	38	37	28			10
10000	189	109	86	95	174	93	70	79	60			11
25000	555	292	229	251	510	247	184	206	155			13
50000	1191	607	475	520	1095	512	380	424	317			14
75000	1786	902	705	770	1643	759	562	628	468			14
100000	2544	1276	997	1089	2341	1073	794	886	661			15

2-WAY MERGE: Core storage capacity — 8K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	2	1	1	1	1	36	18	5
2000	4	3	2	3	4	2	2	2	2			6
5000	14	9	8	8	12	7	6	6	5			8
10000	30	20	17	18	26	16	13	13	11			9
25000	83	56	46	49	71	43	34	37	29			10
50000	181	120	101	108	155	93	74	82	66			11
75000	295	186	156	168	253	144	114	125	101			12
100000	393	243	204	219	337	186	148	162	130			12

2-WAY MERGE: Core storage capacity — 8K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	33	20	16	17	31	18	13	15	11	2	1	9
2000	73	44	34	37	68	39	29	32	24			10
5000	217	123	96	108	201	108	80	93	70			12
10000	468	249	193	216	435	216	159	183	136			13
25000	1256	640	493	552	1166	551	404	463	341			14
50000	2684	1346	1036	1159	2493	1155	845	968	712			15
75000	4284	2134	1642	1837	3981	1831	1339	1533	1126			16
100000	5713	2839	2184	2442	5308	2434	1779	2037	1496			16

2-WAY MERGE: Core storage capacity — 8K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	283	283	2
2000	1	1	1	1	1	1	1	1	*			3
5000	3	3	3	3	2	2	2	2	2			5
10000	7	7	6	6	5	4	4	4	3			6
25000	21	18	17	18	13	11	10	10	9			7
50000	45	40	38	38	29	23	22	22	21			8
75000	74	65	62	62	47	38	35	36	34			9
100000	98	86	82	83	63	51	47	48	45			9

2-WAY MERGE: Core storage capacity — 12K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	2	1	1	2	1	1	1	1	28	28	6
2000	5	4	3	3	5	3	2	2	2			7
5000	15	10	8	9	13	8	6	6	5			8
10000	34	22	18	19	29	17	14	14	11			9
25000	93	60	50	52	81	47	37	39	31			10
50000	204	128	107	114	176	100	80	86	70			11
75000	332	200	168	178	287	155	123	132	106			12
100000	443	262	219	231	383	202	159	171	137			12

2-WAY MERGE: Core storage capacity — 12K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	*	*	*	*	*	*	*	*	141	141	3
2000	1	1	1	1	1	1	1	1	1			4
5000	4	4	3	3	3	2	2	2	2			6
10000	10	8	7	8	7	5	5	5	4			7
25000	27	22	21	21	19	14	13	13	12			8
50000	60	48	45	45	43	31	27	28	25			9
75000	99	79	73	74	71	51	45	46	41			10
100000	132	105	97	98	94	68	60	61	55			10

2-WAY MERGE: Core storage capacity — 12K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	4	3	2	2	4	2	2	2	1	28	14	6
2000	10	6	5	5	9	5	4	4	3			7
5000	28	17	14	14	25	14	11	11	9			8
10000	62	38	31	32	55	32	24	25	20			9
25000	171	102	83	89	153	84	65	71	56			10
50000	374	208	169	180	335	169	129	141	109			11
75000	609	330	267	284	545	266	203	221	171			12
100000	812	435	352	374	727	350	267	289	224			12

2-WAY MERGE: Core storage capacity — 12K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	70	70	4
2000	2	2	1	1	2	1	1	1	1			5
5000	7	5	5	5	5	4	3	3	3			7
10000	16	11	10	10	12	8	7	7	6			8
25000	43	32	28	28	34	22	19	19	16			9
50000	95	69	61	62	75	49	41	42	36			10
75000	156	116	102	101	123	83	70	68	58			11
100000	207	150	132	138	164	106	89	95	81			11

2-WAY MERGE: Core storage capacity — 12K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	12	7	6	6	11	6	5	5	4	10	5	7
2000	27	16	12	13	24	14	10	11	8			8
5000	74	44	35	36	68	38	28	30	23			9
10000	163	94	74	81	150	80	61	67	51			10
25000	485	253	199	215	445	213	159	175	132			12
50000	1046	528	415	446	960	441	329	360	271			13
75000	1570	783	616	661	1440	654	487	531	399			13
100000	2246	1113	875	938	2061	928	690	753	565			14

2-WAY MERGE: Core storage capacity — 12K; Record length — 500; Control Field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	1	1	1	1	1	35	35	5
2000	4	3	2	2	3	2	2	2	1			6
5000	13	9	7	7	11	7	5	5	4			8
10000	28	19	16	16	24	15	12	12	10			9
25000	78	52	44	45	66	40	32	33	27			10
50000	171	113	96	102	145	87	70	76	62			11
75000	278	175	149	157	236	134	107	115	94			12
100000	370	229	194	204	314	173	138	149	121			12

2-WAY MERGE: Core storage capacity — 12K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	27	16	12	13	25	14	10	11	8	4	2	8
2000	59	35	27	29	55	31	23	24	18			9
5000	179	101	79	87	166	88	66	74	56			11
10000	389	204	159	173	360	175	130	144	108			12
25000	1051	523	407	442	973	445	329	363	270			13
50000	2256	1103	856	928	2089	936	689	761	564			14
75000	3616	1755	1362	1475	3348	1487	1094	1207	894			15
100000	4821	2334	1811	1961	4464	1977	1454	1604	1187			15

2-WAY MERGE: Core storage capacity — 12K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	399	399	2
2000	1	1	1	1	1	1	1	1	1			3
5000	3	3	3	3	2	2	2	2	1			4
10000	7	6	6	6	4	4	3	3	3			5
25000	19	17	17	17	12	10	9	9	9			6
50000	42	38	36	37	27	22	21	21	20			7
75000	70	62	59	60	44	36	34	34	32			8
100000	93	82	79	79	58	48	45	45	43			8

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 10; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	1	1	1	1	1	78	39	4
2000	4	3	2	2	3	2	2	2	1			5
5000	13	9	7	8	11	7	5	6	5			7
10000	30	20	17	17	26	15	12	13	10			8
25000	84	55	46	47	72	42	34	35	28			9
50000	185	117	99	105	159	91	72	78	63			10
75000	277	169	143	150	238	130	103	111	89			10
100000	404	241	203	213	347	184	146	156	126			11

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 100; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	*	*	*	*	*	*	*	*	199	199	3
2000	1	1	1	1	1	1	1	1	1			4
5000	4	3	3	3	3	2	2	2	2			5
10000	9	7	7	7	6	5	4	4	4			6
25000	25	20	19	19	17	13	11	12	11			7
50000	55	45	41	42	39	28	25	26	23			8
75000	91	73	68	68	64	46	41	42	38			9
100000	121	97	90	91	86	62	55	56	50			9

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 20; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	4	2	2	2	3	2	1	1	1	38	19	5
2000	8	5	4	4	7	4	3	3	3			6
5000	27	17	14	14	24	14	11	11	9			8
10000	61	37	30	31	54	31	24	24	19			9
25000	168	100	82	88	150	82	64	69	54			10
50000	367	204	166	176	328	165	127	137	107			11
75000	551	299	243	257	492	240	184	198	154			11
100000	797	426	346	365	712	341	261	280	218			12

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 200; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	99	99	4
2000	2	2	1	1	2	1	1	1	1			5
5000	6	5	4	4	5	3	3	3	2			6
10000	14	10	9	9	11	7	6	6	5			7
25000	39	28	25	26	30	20	17	17	15			8
50000	86	62	55	56	67	44	37	37	32			9
75000	141	106	94	92	111	76	64	61	52			10
100000	188	137	122	127	148	96	81	86	74			10

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 40; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	11	7	5	6	10	6	4	5	3	14	7	7
2000	26	15	12	12	24	13	10	10	8			8
5000	72	42	33	35	66	36	27	29	22			9
10000	159	91	72	78	146	78	59	65	50			10
25000	435	226	179	191	398	190	142	155	117			11
50000	944	475	375	399	865	395	295	320	241			12
75000	1529	758	598	636	1401	630	470	508	382			13
100000	2038	1005	792	842	1868	835	622	671	505			13

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 500; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	1	98	49	4
2000	3	2	2	2	3	2	1	1	1			5
5000	10	7	6	6	8	5	4	4	3			6
10000	23	15	13	13	19	12	9	10	8			7
25000	63	42	36	37	53	32	26	27	22			8
50000	141	95	81	85	118	72	58	63	52			9
75000	232	148	127	133	196	112	90	97	79			10
100000	310	194	165	173	261	145	117	124	102			10

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 80; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	26	15	12	12	24	13	10	10	8	6	3	8
2000	57	33	26	27	53	29	22	23	17			9
5000	158	89	70	76	146	77	58	64	49			10
10000	345	180	141	152	319	153	114	125	94			11
25000	1011	499	389	417	935	422	313	341	254			13
50000	2171	1051	819	876	2007	887	655	712	530			14
75000	3257	1567	1220	1305	3011	1321	975	1059	787			14
100000	4640	2222	1730	1849	4290	1873	1381	1499	1114			15

2-WAY MERGE: Core storage capacity -- 16K; Record length -- 1000; Control field -- 10

3-Way Merge

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	224	112	2
2000	1	1	1	1	1	*	*	*	*			2
5000	3	2	2	2	2	1	1	1	1			3
10000	6	6	5	5	4	3	3	3	3			4
25000	18	16	15	15	11	9	9	9	8			5
50000	35	32	31	31	22	19	17	18	17			5
75000	60	54	52	52	38	32	29	30	28			6
100000	80	72	69	70	50	42	39	40	38			6

3-WAY MERGE: Core storage capacity — 8K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	2	1	1	1	1	33	11	4
2000	4	3	2	2	3	2	2	2	1			4
5000	11	8	7	7	10	6	5	5	4			5
10000	26	18	15	16	23	14	11	12	10			6
25000	76	55	46	46	65	44	35	35	28			7
50000	151	101	84	91	129	79	62	69	56			7
75000	256	164	137	148	219	127	100	111	89			8
100000	341	215	179	194	292	166	130	145	115			8

3-WAY MERGE: Core storage capacity — 8K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	112	56	2
2000	1	1	1	1	1	1	1	1	1			3
5000	4	3	3	3	2	2	2	2	2			4
10000	8	7	7	7	6	4	4	4	4			5
25000	21	18	16	17	15	11	10	10	9			5
50000	48	40	37	38	34	26	23	24	21			6
75000	73	60	56	57	51	39	34	35	32			6
100000	109	90	83	85	77	58	51	53	48			7

3-WAY MERGE: Core storage capacity — 8K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	3	2	2	2	3	2	1	2	1	15	5	4
2000	8	5	4	5	7	5	3	4	3			5
5000	24	16	13	14	22	13	10	11	9			6
10000	48	32	25	27	43	26	20	22	17			6
25000	139	87	70	78	124	72	55	63	49			7
50000	314	185	149	164	280	152	115	131	100			8
75000	470	272	219	241	420	222	169	191	146			8
100000	699	399	320	352	625	325	246	278	213			9

3-WAY MERGE: Core storage capacity — 8K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	56	28	3
2000	2	2	1	1	2	1	1	1	1			4
5000	6	5	4	4	5	3	3	3	2			5
10000	12	9	8	8	9	6	5	6	5			5
25000	34	26	23	24	27	18	15	16	14			6
50000	78	59	52	54	61	42	35	37	31			7
75000	117	90	80	85	91	65	54	59	50			7
100000	156	117	104	110	121	83	69	75	64			7

3-WAY MERGE: Core storage capacity — 8K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	10	6	5	5	9	5	4	4	3	6	2	5
2000	23	14	11	12	21	12	9	10	8			6
5000	65	44	35	35	60	39	30	30	22			7
10000	131	79	62	70	120	68	51	59	44			7
25000	369	206	161	180	338	175	130	149	111			8
50000	824	446	348	388	755	377	279	319	238			9
75000	1236	663	517	575	1133	560	414	472	351			9
100000	1648	880	686	763	1510	742	548	625	465			9

3-WAY MERGE: Core storage capacity — 8K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	1	1	1	1	1	28	14	4
2000	3	2	2	2	3	2	1	1	1			4
5000	9	7	6	6	8	5	4	4	4			5
10000	22	15	13	14	18	12	9	10	8			6
25000	63	44	37	39	53	34	27	29	23			7
50000	126	87	74	80	106	67	54	60	49			7
75000	213	141	120	129	179	108	86	95	77			8
100000	284	185	156	168	239	140	112	123	100			8

3-WAY MERGE: Core storage capacity — 8K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	22	14	11	12	21	12	9	10	8	3	1	6
2000	44	28	22	24	41	24	18	20	15			6
5000	128	76	60	67	118	67	50	57	43			7
10000	289	161	125	140	267	139	103	118	88			8
25000	808	430	332	371	747	369	271	310	229			9
50000	1615	847	653	730	1493	725	531	608	448			9
75000	2675	1391	1072	1198	2474	1190	871	997	734			10
100000	3567	1850	1426	1593	3299	1582	1158	1325	975			10

3-WAY MERGE: Core storage capacity — 8K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	424	212	1
2000	1	1	1	1	1	1	*	*	*			2
5000	3	3	3	3	2	2	1	1	1			3
10000	6	5	5	5	3	3	3	3	3			3
25000	17	15	15	15	10	9	8	8	8			4
50000	38	35	34	34	23	20	19	19	18			5
75000	57	52	51	51	35	30	28	29	27			5
100000	76	70	67	68	46	40	38	38	36			5

3-WAY MERGE: Core storage capacity — 12K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	1	42	21	3
2000	3	2	2	2	3	2	1	2	1			4
5000	11	7	6	6	9	6	4	5	4			5
10000	21	14	12	13	18	11	9	9	7			5
25000	61	42	35	36	52	32	26	27	22			6
50000	141	94	79	84	119	72	58	63	51			7
75000	211	136	115	122	179	103	82	89	72			7
100000	317	199	168	178	269	151	120	130	105			8

3-WAY MERGE: Core storage capacity — 12K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	212	106	2
2000	1	1	1	1	1	1	1	1	1			3
5000	3	3	3	3	2	2	1	2	1			3
10000	7	6	6	6	5	4	3	4	3			4
25000	21	18	17	17	14	11	10	10	9			5
50000	43	36	34	34	29	22	20	21	19			5
75000	73	61	57	58	50	38	34	35	32			6
100000	97	81	76	77	67	51	46	47	42			6

3-WAY MERGE: Core storage capacity — 12K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	3	2	2	2	3	2	1	1	1	30	10	4
2000	6	4	3	3	5	3	3	3	2			4
5000	19	12	10	10	17	10	8	8	6			5
10000	44	28	23	24	39	23	18	19	15			6
25000	126	79	65	70	112	65	50	55	43			7
50000	253	149	121	130	224	120	92	101	79			7
75000	428	245	199	214	380	196	151	165	128			8
100000	571	323	263	281	506	258	198	216	168			8

3-WAY MERGE: Core storage capacity — 12K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	106	53	3
2000	2	1	1	1	1	1	1	1	1			3
5000	5	4	3	3	4	3	2	2	2			4
10000	11	9	8	8	9	6	5	5	5			5
25000	28	22	20	20	22	15	13	13	11			5
50000	66	50	45	46	50	34	29	30	26			6
75000	99	78	70	69	75	54	46	45	39			6
100000	150	114	102	107	115	79	67	71	62			7

3-WAY MERGE: Core storage capacity — 12K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	9	5	4	5	8	5	3	4	3	12	4	5
2000	17	11	9	9	16	9	7	7	6			5
5000	51	35	28	26	47	31	23	22	16			6
10000	118	71	56	61	108	60	46	51	39			7
25000	295	162	128	139	269	136	102	113	85			7
50000	667	354	280	302	608	296	221	243	183			8
75000	1001	526	415	448	912	438	326	359	270			8
100000	1488	775	611	659	1358	645	480	528	397			9

3-WAY MERGE: Core storage capacity — 12K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	*	52	26	3
2000	3	2	2	2	2	2	1	1	1			4
5000	9	6	5	6	7	5	4	4	3			5
10000	18	12	11	11	15	9	8	8	6			5
25000	52	36	31	32	43	27	22	23	19			6
50000	118	83	71	75	98	63	51	55	45			7
75000	178	119	102	108	148	89	72	78	64			7
100000	237	156	134	141	197	116	93	101	83			7

3-WAY MERGE: Core storage capacity — 12K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	17	10	8	9	16	9	7	7	5	6	2	5
2000	40	24	19	20	37	21	16	17	13			6
5000	115	68	53	59	106	59	44	49	38			7
10000	231	126	99	108	212	108	80	89	67			7
25000	652	339	264	287	600	288	213	235	175			8
50000	1455	742	577	625	1340	627	463	510	379			9
75000	2182	1107	861	932	2010	935	689	760	564			9
100000	2910	1471	1144	1238	2680	1242	915	1009	748			9

3-WAY MERGE: Core storage capacity — 12K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	312	312	2
2000	1	1	1	1	1	*	*	*	*			2
5000	3	3	2	2	2	1	1	1	1			3
10000	6	6	6	6	4	3	3	3	3			4
25000	16	15	14	14	10	8	8	8	8			4
50000	36	33	32	32	22	19	18	18	17			5
75000	54	49	48	48	33	28	27	27	26			5
100000	81	74	71	72	50	42	40	40	38			6

3-WAY MERGE: Core storage capacity — 16K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	*	62	31	3
2000	3	2	2	2	3	2	1	1	1			4
5000	9	6	5	5	7	4	4	4	3			4
10000	20	14	12	12	17	11	9	9	7			5
25000	60	40	34	35	50	31	25	26	21			6
50000	137	91	77	82	115	70	56	60	49			7
75000	205	132	112	118	173	100	80	86	70			7
100000	274	173	147	154	231	130	104	111	91			7

3-WAY MERGE: Core storage capacity — 16K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	*	*	*	*	*	*	*	*	312	156	2
2000	1	1	1	1	1	1	1	1	*			2
5000	3	3	3	3	2	2	2	2	1			3
10000	8	7	6	6	5	4	4	4	3			4
25000	19	17	16	16	13	10	9	9	9			4
50000	44	38	36	36	30	23	21	21	20			5
75000	66	57	53	54	44	35	31	32	29			5
100000	100	85	80	80	68	52	47	48	44			6

3-WAY MERGE: Core storage capacity — 16K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	2	1	1	2	1	1	1	1	45	15	3
2000	6	4	3	3	5	3	2	3	2			4
5000	18	12	10	10	16	9	7	8	6			5
10000	36	23	19	20	32	19	15	15	12			5
25000	107	67	55	59	94	55	43	46	37			6
50000	245	144	118	125	216	115	89	96	76			7
75000	368	211	173	183	324	168	129	140	109			7
100000	554	312	256	270	489	247	191	205	161			8

3-WAY MERGE: Core storage capacity — 16K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	*	*	*	*	*	*	*	156	78	2
2000	2	1	1	1	1	1	1	1	1			3
5000	5	4	3	3	4	3	2	2	2			4
10000	10	8	7	7	7	5	4	4	4			4
25000	29	22	20	20	21	15	13	13	11			5
50000	66	50	45	46	50	34	29	30	26			6
75000	99	79	71	69	75	54	46	45	39			6
100000	132	102	92	96	99	70	60	63	55			6

3-WAY MERGE: Core storage capacity — 16K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	7	4	3	4	6	4	3	3	2	18	6	4
2000	17	10	8	9	15	9	7	7	5			5
5000	50	30	24	25	45	26	19	20	15			6
10000	99	60	48	51	90	51	38	42	33			6
25000	285	156	124	132	259	130	98	107	81			7
50000	644	339	269	287	586	281	211	229	173			8
75000	966	504	399	425	879	416	311	338	255			8
100000	1288	668	529	563	1172	552	412	447	337			8

3-WAY MERGE: Core storage capacity — 16K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	*	78	39	3
2000	2	2	1	2	2	1	1	1	1			3
5000	7	5	4	5	6	4	3	3	3			4
10000	17	12	11	11	14	9	7	8	6			5
25000	51	35	30	31	42	26	21	22	18			6
50000	102	72	62	65	84	54	44	47	39			6
75000	174	117	101	106	144	87	71	76	63			7
100000	232	153	132	139	192	113	92	98	81			7

3-WAY MERGE: Core storage capacity — 16K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	16	10	8	8	15	9	6	7	5	9	3	5
2000	33	20	15	16	30	17	13	13	10			5
5000	97	57	45	49	89	49	37	41	31			6
10000	222	121	95	102	204	103	77	84	63			7
25000	628	324	253	271	578	273	203	221	165			8
50000	1257	637	497	532	1155	535	396	430	321			8
75000	2103	1055	823	880	1934	886	655	711	530			9
100000	2804	1402	1095	1169	2579	1177	870	944	703			9

3-WAY MERGE: Core storage capacity — 16K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	224	112	1
2000	1	1	1	1	1	*	*	*	*			2
5000	3	2	2	2	2	1	1	1	1			4
10000	6	5	5	5	4	3	3	3	3			5
25000	17	15	14	14	11	9	8	8	8			6
50000	36	31	30	30	23	19	17	18	16			7
75000	57	50	47	48	37	30	27	28	26			8
100000	80	69	65	66	53	42	38	39	36			9

MULTIPHASE: Core storage capacity -- 8K; Record length -- 10; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	2	1	1	1	1	22	11	5
2000	5	3	3	3	4	3	2	2	2			6
5000	13	9	7	8	12	7	6	6	5			7
10000	31	20	16	17	27	16	13	14	11			9
25000	85	59	49	48	75	49	38	38	30			10
50000	185	112	93	102	163	91	71	80	63			11
75000	295	170	140	153	261	136	106	119	94			12
100000	398	225	185	202	351	179	139	155	122			12

MULTIPHASE: Core storage capacity -- 8K; Record length -- 100; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	*	*	*	*	*	*	*	*	112	56	2
2000	1	1	1	1	1	1	1	1	1			3
5000	4	3	3	3	3	2	2	2	2			5
10000	8	6	6	6	6	4	4	4	3			6
25000	22	18	16	17	16	12	10	11	9			7
50000	51	40	36	37	38	27	23	24	21			9
75000	78	62	56	58	58	41	36	37	33			9
100000	110	86	78	80	82	58	50	52	46			10

MULTIPHASE: Core storage capacity -- 8K; Record length -- 20; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	4	3	2	2	4	2	2	2	2	10	5	6
2000	10	6	5	5	9	5	4	4	3			7
5000	29	18	15	16	27	16	12	13	10			9
10000	64	40	32	34	58	34	26	28	22			10
25000	175	101	81	90	160	86	65	75	58			11
50000	394	208	166	184	360	174	131	150	114			13

MULTIPHASE: Core storage capacity -- 8K; Record length -- 200; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	56	28	3
2000	2	1	1	1	1	1	1	1	1			4
5000	6	4	4	4	5	3	3	3	2			6
10000	13	9	8	9	10	7	6	6	5			7
25000	38	27	23	24	31	20	16	17	14			9
50000	82	59	51	53	67	43	35	38	31			10
75000	126	92	80	86	103	68	56	62	52			10
100000	178	124	108	115	146	91	75	83	69			11

MULTIPHASE: Core storage capacity -- 8K; Record length -- 40; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	13	8	6	7	12	7	5	6	4	4	2	8
2000	28	17	13	14	26	15	11	12	9			9
5000	77	50	40	39	72	45	34	34	25			10
10000	168	94	73	83	156	82	61	71	54			11

MULTIPHASE: Core storage capacity -- 8K; Record length -- 500; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	1	1	1	1	1	28	14	4
2000	4	3	2	2	3	2	2	2	1			6
5000	11	7	6	6	9	6	5	5	4			7
10000	24	16	13	14	21	13	10	11	9			8
25000	70	46	38	40	61	37	29	31	25			10
50000	151	97	81	88	131	77	61	68	55			11
75000	230	140	117	127	200	110	87	97	78			11
100000	325	191	160	173	284	150	118	131	105			12

MULTIPHASE: Core storage capacity -- 8K; Record length -- 80; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	28	17	13	14	26	15	11	12	9	2	1	9
2000	60	36	28	30	56	32	24	26	20			10
5000	165	91	71	80	155	81	60	70	52			11
10000	373	186	144	162	349	163	120	138	103			13

MULTIPHASE: Core storage capacity -- 8K; Record length -- 1000; Control field -- 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	424	212	1
2000	1	1	1	1	1	1	*	*	*			1
5000	3	3	2	2	2	1	1	1	1			3
10000	6	5	5	5	4	3	3	3	3			4
25000	17	15	14	14	10	9	8	8	8			5
50000	36	32	31	31	22	19	17	18	17			6
75000	57	51	49	49	36	30	28	28	26			7
100000	77	68	66	66	49	40	37	38	36			7

MULTIPHASE: Core storage capacity — 12K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	2	1	1	1	1	1	1	1	1	42	21	4
2000	4	3	2	2	3	2	2	2	1			5
5000	11	7	6	6	10	6	5	5	4			6
10000	26	17	14	15	23	14	11	11	9			8
25000	73	47	39	40	63	37	29	31	25			9
50000	159	98	82	88	138	78	61	68	54			10
75000	254	149	124	133	222	117	92	100	80			11
100000	343	196	164	174	299	153	120	131	105			11

MULTIPHASE: Core storage capacity — 12K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	212	106	1
2000	1	1	1	1	1	1	1	1	*			2
5000	3	3	3	3	2	2	2	2	1			4
10000	7	6	6	6	5	4	3	4	3			5
25000	21	17	16	16	15	11	10	10	9			6
50000	45	36	34	34	32	23	21	21	19			7
75000	72	58	54	54	52	37	33	34	30			8
100000	102	81	75	76	73	52	46	47	42			9

MULTIPHASE: Core storage capacity — 12K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	4	2	2	2	3	2	1	2	1	20	10	5
2000	8	5	4	4	7	4	3	3	3			6
5000	24	15	12	12	22	12	10	10	8			8
10000	53	32	26	27	48	27	21	22	17			9
25000	147	86	69	76	133	72	55	61	48			10
50000	318	170	137	148	287	140	107	118	91			11

MULTIPHASE: Core storage capacity — 12K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	106	53	2
2000	2	1	1	1	1	1	1	1	1			3
5000	5	4	3	3	4	3	2	2	2			5
10000	11	8	7	8	9	6	5	5	4			6
25000	32	23	20	21	25	16	14	14	12			7
50000	73	52	46	47	58	37	31	32	27			9
75000	112	83	73	72	89	60	51	49	42			9
100000	158	113	99	105	126	81	68	73	62			10

MULTIPHASE: Core storage capacity — 12K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	10	6	5	5	9	5	4	4	3	8	4	6
2000	23	14	11	11	21	12	9	9	7			8
5000	64	42	34	31	59	37	29	26	20			9
10000	139	78	62	68	129	68	51	57	44			10
25000	399	198	156	170	369	168	126	140	105			12

MULTIPHASE: Core storage capacity — 12K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	*	52	26	3
2000	3	2	2	2	3	2	1	1	1			5
5000	9	6	5	5	8	5	4	4	3			6
10000	20	14	11	12	17	11	8	9	7			7
25000	60	39	33	34	51	31	24	26	21			9
50000	131	85	72	77	112	67	54	59	48			10
75000	200	124	105	112	171	96	76	83	67			10
100000	283	169	143	152	243	130	103	112	91			11

MULTIPHASE: Core storage capacity — 12K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	23	13	10	11	21	12	9	9	7	4	2	8
2000	50	29	23	24	46	25	19	20	15			9
5000	137	76	60	66	127	66	50	56	43			10
10000	297	149	116	127	276	129	96	107	80			11

MULTIPHASE: Core storage capacity — 12K; Record length — 1000; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	*	*	*	*	*	*	*	*	*	312	312	1
2000	1	1	1	1	1	1	*	*	*			2
5000	3	2	2	2	2	1	1	1	1			3
10000	6	5	5	5	4	3	3	3	3			4
25000	17	15	14	14	10	9	8	8	8			6
50000	36	32	30	31	23	19	17	17	17			7
75000	57	50	48	48	36	29	27	28	26			8
100000	77	68	65	65	49	40	37	37	35			8

MULTIPHASE: Core storage capacity — 16K; Record length — 10; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	1	62	31	3
2000	3	2	2	2	3	2	1	1	1			4
5000	11	7	6	6	9	5	4	4	4			6
10000	24	15	13	13	20	12	10	10	8			7
25000	66	42	35	36	57	33	26	27	22			8
50000	151	93	78	84	131	74	59	64	51			10
75000	231	137	115	122	201	106	84	91	73			10
100000	327	187	157	166	285	145	114	123	99			11

MULTIPHASE: Core storage capacity — 16K; Record length — 100; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	*	*	*	*	*	*	*	312	156	1
2000	1	1	1	1	1	1	1	1	1			2
5000	3	3	3	3	2	2	2	2	1			3
10000	7	6	6	6	5	4	3	3	3			4
25000	21	17	16	16	14	11	10	10	9			6
50000	46	37	35	35	32	23	21	21	19			7
75000	73	59	55	55	51	37	33	34	31			8
100000	98	80	74	75	69	51	45	46	42			8

MULTIPHASE: Core storage capacity — 16K; Record length — 20; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	3	2	2	2	3	2	1	1	1	30	15	4
2000	7	4	4	4	6	4	3	3	2			5
5000	21	13	11	11	19	11	8	9	7			7
10000	48	29	23	24	43	24	19	19	15			8
25000	139	81	66	71	125	67	52	57	45			10
50000	301	161	130	139	272	131	101	110	85			11

MULTIPHASE: Core storage capacity — 16K; Record length — 200; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	*	*	*	*	156	78	2
2000	2	1	1	1	1	1	1	1	1			3
5000	5	4	3	3	3	2	2	2	2			4
10000	10	8	7	7	8	5	5	5	4			5
25000	31	23	20	21	24	16	13	14	12			7
50000	68	49	44	45	53	35	29	30	26			8
75000	109	82	73	71	86	59	50	48	41			9
100000	148	107	95	100	116	76	64	68	59			9

MULTIPHASE: Core storage capacity — 16K; Record length — 40; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	9	5	4	4	8	5	4	4	3	12	6	6
2000	20	12	9	10	19	10	8	8	6			7
5000	57	33	26	27	52	29	22	23	17			8
10000	132	74	59	64	121	64	48	54	41			10
25000	361	180	142	153	333	152	114	125	95			11

MULTIPHASE: Core storage capacity — 16K; Record length — 500; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	1	1	1	1	1	1	1	1	*	78	39	3
2000	3	2	2	2	2	1	1	1	1			4
5000	8	6	5	5	7	4	3	4	3			5
10000	18	12	10	11	15	9	8	8	6			6
25000	55	36	31	31	46	28	22	23	19			8
50000	119	79	67	72	101	61	49	54	44			9
75000	192	120	102	107	164	91	73	79	65			10
100000	259	157	134	141	221	119	96	103	84			10

MULTIPHASE: Core storage capacity — 16K; Record length — 80; Control field — 10

INPUT FILE SIZE	1401				1460					G	B	P
	7330	729-II	729-IV	729-V	7330	729-II	729-IV	729-V	729-VI			
1000	20	12	9	9	18	10	8	8	6	6	3	7
2000	44	26	20	21	41	22	17	18	13			8
5000	129	72	56	62	120	62	47	52	40			10
10000	281	140	110	119	261	120	90	99	75			11

MULTIPHASE: Core storage capacity — 16K; Record length — 1000; Control field — 10



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