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1      ; *****
2      ; *   SHARP ZEN, WRITTEN BY   *
3      ; *   JOHN HAWTHORNE       *
4      ; *                           *
5      ; * ----- COPYRIGHT 1980 ----- *
6      ; *   AVALON SOFTWARE       *
7      ; *   OF ENGLAND           *
8      ; *****
9
10     ORG 1200H
11
12     CR:      EQU 13
13     FF:      EQU 12
14     BS:      EQU 8
15     BLANK:   EQU 32
16
17     ; EXTERNAL VARIABLE SPACE
18
19     HBUFF:    EQU 10FOH
20     FILESIZE: EQU HBUFF+18
21     FILESTART: EQU HBUFF+20
22     FILEEXEC: EQU HBUFF+22
23     TBUFF:    EQU 11A3H
24
25     ; CALLS TO SP-1002 MONITOR
26
27     PHEAD:    EQU 21H
28     PDATA:    EQU 24H
29     LHEAD:    EQU 27H
30     LDATA:    EQU 2AH
31     CHECK:    EQU 588H
32     SCREEN:   EQU 0FB1H
33     BREAK:    EQU 0A44H
34     BEEP:     EQU 2E5H
35     CURSOR:   EQU 1171H
36     CONTROL:  EQU 0DDCH
37     GETCHAR:  EQU 9B3H
38     NORMAL:   EQU 0BCEH
39     SPECIAL:  EQU 0BB9H
40
41     ; DISPLACEMENT OF EACH FLAG FROM
42     ; THE IX REGISTER
43
44     F1:      EQU 0
45     F2:      EQU 1
46     F3:      EQU 2
47     F5:      EQU 3
48     F6:      EQU 4
49     F7:      EQU 5
50
51     ; CODE STARTS HERE, SKIP OVER
52     ; TEXT AND VARIABLE STORAGE.
53
54 1200 C32B13 ENTRY:    JP    ZEN
55 1203 C38C18 REENTRY: JP    TRAP
56
57 1206 5A454E3E M1:    DB    'ZEN)', CR
57 120A 0D
58 120B 4855483F M2:    DB    'HUH?', CR
58 120F 0D

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59	1210	42414420	M3:	DB	'BAD READ',CR
59	1214	52454144			
59	1218	0D			
60	1219	50414745	M4:	DB	'PAGE',CR
60	121D	0D			
61	121E	454F460D	M5:	DB	'EOF',CR
62	1222	4C4F4144	M6:	DB	'LOAD)',CR
62	1226	3E0D			
63	1228	4F505449	M7:	DB	'OPTION)',CR
63	122C	4F4E3E0D			
64	1230	464F554E	M8:	DB	'FOUND ',CR
64	1234	44200D			
65	1237	52455345	M12:	DB	'RESERVED',CR
65	123B	52564544			
65	123F	0D			
66	1240	4D454D4F	M20:	DB	'MEMORY '
66	1244	525920			
67	1247	46554C4C	M14:	DB	'FULL',CR
67	124B	0D			
68	124C	444F5542	M13:	DB	'DOUBLE '
68	1250	4C4520			
69	1253	53594D42	M15:	DB	'SYMBOL',CR
69	1257	4F4C0D			
70	125A	4F504552	M16:	DB	'OPERAND',CR
70	125E	414E440D			
71	1262	554E4445	M17:	DB	'UNDEFINED',CR
71	1266	46494E45			
71	126A	440D			
72	126C	4F524721	M18:	DB	'ORG!',CR
72	1270	0D			
73	1271	4E414D45	M21:	DB	'NAME)',CR
73	1275	3E0D			
74	1277	53544152	M22:	DB	'START)',CR
74	127B	543E0D			
75	127E	53544F50	M23:	DB	'STOP)',CR
75	1282	3E0D			
76	1284	424B5054	M24:	DB	'BKPT)',CR
76	1288	3E0D			
77	128A	45584543	M25:	DB	'EXEC)',CR
77	128E	3E0D			
78	1290	44455354	M27:	DB	'DEST)',CR
78	1294	3E0D			
79	1296	44415441	M28:	DB	'DATA)',CR
79	129A	3E0D			
80	129C	20484C20	M29:	DB	' HL DE '
80	12A0	20204445			
80	12A4	202020			
81	12A7	42432020		DB	'BC AF RI',CR
81	12AB	20414620			
81	12AF	20205249			
81	12B3	0D			
82	12B4	20495820	M30:	DB	' IX IY '
82	12B8	20204959			
82	12BC	202020			
83	12BF	53502020		DB	'SF PC',CR
83	12C3	2050430D			
84					
85	12C7	560000	FLAGS:	DB	'V',0,0
86	12CA	000000		DB	0,0,0
87					

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88          ; LISTING FIELD WIDTHS
89
90 12CD 3C14   COMWIDTH:   DB    60,20
91 12CF 0C07   SYMWIDTH:   DB    12,7
92 12D1 0505                   DB    5,5
93 12D3 1207                   DB    18,7
94 12D5 1901                   DB    25,1
95
96 12D7 0000   PAGEND:     DW    0          ; PAGE NUMBER
97 12D9 0000   LCT:       DW    0          ; LINE COUNTER
98 12DB 0000   LIMIT:     DW    0
99 12DD 0000   CURRENT:   DW    0          ; CURRENT LINE
100 12DF 0025   SOFP:     DW    AEND+463   ; START OF FILE
101 12E1 0025   EOF:      DW    AEND+463   ; END OF FILE
102 12E3 0000   CUROBJ:   DW    0          ; CURRENT OBJECT
103 12E5 0000   TEMP:     DW    0          ; TEMPORARY
104 12E7 0000   FEP:      DW    0          ; FREE ENTRY POINTER
105 12E9 0000   STK:     DW    0          ; SP SAVE BUFFER
106 12EB 0000   LBLP:   DW    0          ; LABEL POINTER
107 12ED 0000   PC:     DW    0          ; PROGRAM COUNTER
108 12EF 0000   OBJ:    DW    0          ; OBJECT POINTER
109 12F1 0000   BKPTADDR: DW    0          ; ADDR OF BKPT
110 12F3 00    BKPTCODE:  DB    0          ; CODE AT BKPT
111 12F4 000000 CODE:     DB    0,0,0        ; CODE REPLACED
112
113          USTK:     DS    24          ; USER STACK
114 130F 0000   IMAGE:   DW    0          ; USER REGISTER IMAGE
115 1311 0000                   DW    0
116 1313 0000                   DW    0
117 1315 0000                   DW    0
118 1317 0000                   DW    0
119 1319 0000                   DW    0
120 131B 0000                   DW    0
121 131D 0000                   DW    0
122 131F 0000                   DW    0
123 1321 0000                   DW    0
124 1323 0000                   DW    0
125
126          ; GOTO EXIT ROUTINE
127
128 1325 310F13 EXIT:     LD    SP,IMAGE   - 10EC
129 1328 C30000   JP    0
130
131          USP:     EQU   EXIT+1        ; USER SP
132          UPC:     EQU   EXIT+4        ; USER PC
133
134          ; START OF ZEN MAINLOOP
135
136 132B 31F010 ZEN:     LD    SP,HBUFF
137 132E DD21C712 LD    IX,FLAGS
138 1332 CDCA13   CALL TOP
139 1335 CDE502   CALL BEEP
140 1338 CD1817   CALL CR1F
141 133B 213B13 LD    HL,$
142 133E E5      PUSH HL
143 133F ED73E912 LD    (STK),SP
144 1343 DD360056 LD    (IX+F1),'V'
145 1347 2E06    LD    L,M1&255
146 1349 CDB917   CALL CUE
147 134C 0D      DEC  C

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148	134D	CA7919	JP	Z, CLEAR	JP-2366 patch
149	1350	FE53	CP	'S'	
150	1352	CA1D15	JP	Z, SORT	
151	1355	FE52	CP	'R'	
152	1357	CADF14	JP	Z, READ	
153	135A	FE57	CP	'W'	
154	135C	CA9C14	JP	Z, WRITE	
155	135F	FE56	CP	'V'	
156	1361	CACB14	JP	Z, VERIFY	
157	1364	FE4C	CP	'L'	
158	1366	2B24	JR	Z, LOCATE	
159	1368	E5	PUSH	HL	
160	1369	C5	PUSH	BC	
161	136A	OE01	LD	C, 1	
162	136C	11A311	LD	DE, TBUFF	
163	136F	21C316	LD	HL, COMTAB	
164	1372	CD6E1C	CALL	SEARCH	
165	1375	DA1919	JP	C, E10	
166	1378	C1	POP	BC	
167	1379	E3	EX	(SF), HL	
168	137A	41	LD	B, C	
169	137B	05	DEC	B	
170	137C	37	SCF		
171	137D	2B09	JR	Z, ZEN2	
172	137F	13	INC	DE	
173	1380	CD1E19	CALL	CONVERT	
174	1383	DA1919	JP	C, E10	
175	1386	44	LD	B, H	
176	1387	4D	LD	C, L	
177	1388	2ADD12	LD	HL, (CURRENT)	ZEN2:
178	138B	C9	RET		
179					
180	138C	0D	DEC	C	LOCATE:
181	138D	CA1919	JP	Z, E10	
182	1390	2ADD12	LD	HL, (CURRENT)	
183	1393	C5	PUSH	BC	
184	1394	CDB619	CALL	NEXT	
185	1397	C1	POP	BC	
186	1398	2B	DEC	HL	
187	1399	E5	PUSH	HL	
188	139A	E1	POP	HL	LC1:
189	139B	7E	LD	A, (HL)	
190	139C	23	INC	HL	
191	139D	FE0D	CP	CR	
192	139F	CC0F1A	CALL	Z, UPDATE	
193	13A2	CDFA16	CALL	EOF	
194	13A5	41	LD	B, C	
195	13A6	11A411	LD	DE, TBUFF+1	
196	13A9	E5	PUSH	HL	
197	13AA	1A	LD	A, (DE)	LC2:
198	13AB	BE	CP	(HL)	
199	13AC	20EC	JR	NZ, LC1	
200	13AE	13	INC	DE	
201	13AF	23	INC	HL	
202	13B0	10F8	DJNZ	LC2	
203	13B2	E1	POP	HL	
204	13B3	CD2B14	CALL	THIS	
205	13B6	1832	JR	LINE	
206					
207	13B8	78	LD	A, B	UP:

208	13B9	B1		OR	C
209	13BA	282E		JR	Z,LINE
210	13BC	CD1E14		CALL	LAST
211	13BF	3029		JR	NC,LINE
212	13C1	0B		DEC	BC
213	13C2	18F4		JR	UP
214					
215	13C4	2ADF12	KILL:	LD	HL,(SOFP)
216	13C7	22E112		LD	(EOFP),HL
217					
218	13CA	210100	TOP:	LD	HL,1
219	13CD	22D912		LD	(LCT),HL
220	13D0	2ADF12		LD	HL,(SOFP)
221	13D3	22DD12		LD	(CURRENT),HL
222	13D6	C9		RET	
223					
224	13D7	CDCA13	TARGET:	CALL	TOP
225	13DA	0B		DEC	BC
226					
227	13DB	78	DOWN:	LD	A,B
228	13DC	B1		OR	C
229	13DD	280B		JR	Z,LINE
230	13DF	C5		PUSH	BC
231	13E0	CDB619		CALL	NEXT
232	13E3	C1		POP	BC
233	13E4	CDOF1A		CALL	UPDATE
234	13E7	0B		DEC	BC
235	13E8	18F1		JR	DOWN
236	13EA	CDFA16	LINE:	CALL	EOF
237	13ED	CDC419		CALL	POSITION
238	13F0	C31517		JP	PR3
239					
240	13F3	78	ZAP:	LD	A,B
241	13F4	B1		OR	C
242	13F5	28F3		JR	Z,LINE
243	13F7	E5		PUSH	HL
244	13F8	C5		PUSH	BC
245	13F9	CDD818		CALL	REMOVE
246	13FC	C1		POP	BC
247	13FD	E1		POP	HL
248	13FE	0B		DEC	BC
249	13FF	18F2		JR	ZAP
250					
251	1401	2E53	EO:	LD	L,M15&255
252	1403	ED7BE912	ER:	LD	SP,(STK)
253	1407	CDOC17		CALL	ERR2
254	140A	2AE512		LD	HL,(TEMP)
255	140D	010100		LD	BC,1
256					
257	1410	78	PRINT:	LD	A,B
258	1411	B1		OR	C
259	1412	280A		JR	Z,LAST
260	1414	CDEA13		CALL	LINE
261	1417	23		INC	HL
262	1418	CDOF1A		CALL	UPDATE
263	141B	0B		DEC	BC
264	141C	18F2		JR	PRINT
265					
266	141E	E5	LAST:	PUSH	HL
267	141F	2AD912		LD	HL,(LCT)

268	1422	2B		DEC	HL
269	1423	22D912		LD	(LCT),HL
270	1426	E1		POP	HL
271	1427	2B		DEC	HL
272	1428	CD7E19	THIS:	CALL	SOF
273	1428	309D		JR	NC, TOP
274	142D	2B		DEC	HL
275	142E	7E		LD	A, (HL)
276	142F	FE0D		CP	CR
277	1431	20F5		JR	NZ, THIS
278	1433	23		INC	HL
279	1434	22DD12		LD	(CURRENT),HL
280	1437	37		SCF	
281	1438	C9		RET	
282					
283	1439	CDC419	ENTER:	CALL	POSITION
284	143C	EB		EX	DE,HL
285	143D	CDBC17		CALL	USER
286	1440	FE2E		CP	','
287	1442	C8		RET	Z
288	1443	2AE112		LD	HL, (EOFF)
289	1446	CD8919		CALL	MEMCHECK
290	1449	CD8014		CALL	INSERT
291	144C	EB		EX	DE,HL
292	144D	CD0F1A		CALL	UPDATE
293	1450	18E7		JR	ENTER
294					
295	1452	E5	NEW:	PUSH	HL
296	1453	CDB619		CALL	NEXT
297	1456	2AE112		LD	HL, (EOFF)
298	1459	ED42		SBC	HL, BC
299	145B	E3		EX	(SP),HL
300	145C	E5		PUSH	HL
301	145D	C5		PUSH	BC
302	145E	11A311		LD	DE, TBUFF
303	1461	D5		PUSH	DE
304	1462	EDB0		LDIR	
305	1464	E1		POP	HL
306	1465	C1		POP	BC
307	1466	0B		DEC	BC
308	1467	CDC419		CALL	POSITION
309	146A	CDAF17		CALL	STR1
310	146D	CDC617		CALL	US1
311	1470	CD1817		CALL	CRLF
312	1473	E1		POP	HL
313	1474	E3		EX	(SP),HL
314	1475	CD8919		CALL	MEMCHECK
315	1478	E1		POP	HL
316	1479	E5		PUSH	HL
317	147A	C5		PUSH	BC
318	147B	CDD818		CALL	REMOVE
319	147E	C1		POP	BC
320	147F	D1		POP	DE
321					
322	1480	D5	INSERT:	PUSH	DE
323	1481	C5		PUSH	BC
324	1482	2AE112		LD	HL, (EOFF)
325	1485	E5		PUSH	HL
326	1486	09		ADD	HL, BC
327	1487	22E112		LD	(EOFF),HL

328	148A	E3		EX	(SP),HL
329	148B	E5		PUSH	HL
330	148C	ED52		SBC	HL,DE
331	148E	E3		EX	(SP),HL
332	148F	C1		POP	BC
333	1490	D1		POP	DE
334	1491	03		INC	BC
335	1492	EDB8		LDDR	
336	1494	C1		POP	BC
337	1495	D1		POP	DE
338	1496	21A311		LD	HL,TBUFF
339	1499	EDB0		LDIR	
340	149B	C9		RET	
341					
342	149C	3E04	WRITE:	LD	A,4
343	149E	ED5BDF12		LD	DE,(SOFP)
344	14A2	D5		PUSH	DE
345	14A3	FDE1		POP	IY
346	14A5	2AE112		LD	HL,(EOFP)
347	14A8	ED52		SBC	HL,DE
348	14AA	0D		DEC	C
349	14AB	C4EC17		CALL	NZ,OWRITE
350	14AE	ED530411		LD	(FILESTART),DE
351	14B2	220211		LD	(FILESIZE),HL
352	14B5	CD0418		CALL	GETNAME
353	14B8	CD2100		CALL	PHEAD
354	14BB	DA2B13		JP	C,ZEN
355	14BE	FD220411		LD	(FILESTART),IY
356	14C2	CD2400		CALL	PDATA
357	14C5	DA2B13		JP	C,ZEN
358	14C8	C31817		JP	CRLF
359					
360	14CB	CD2018	VERIFY:	CALL	FINDFILE
361	14CE	FD220411		LD	(FILESTART),IY
362	14D2	CD8805		CALL	CHECK
363	14D5	D0		RET	NC
364	14D6	3D	BADNEWS:	DEC	A
365	14D7	C22B13		JP	NZ,ZEN
366	14DA	2E10	E3:	LD	L,M3&255
367	14DC	C30817		JP	ERR
368					
369	14DF	CD2018	READ:	CALL	FINDFILE
370	14E2	280C		JR	Z,RSOURCE
371	14E4	CD2A00		CALL	LDATA
372	14E7	38ED		JR	C,BADNEWS
373	14E9	2A0611		LD	HL,(FILEEXEC)
374	14EC	222913		LD	(UPC),HL
375	14EF	C9		RET	
376					
377	14F0	2AE112	RSOURCE:	LD	HL,(EOFP)
378	14F3	E5		PUSH	HL
379	14F4	ED4B0211		LD	BC,(FILESIZE)
380	14F8	CD8919		CALL	MEMCHECK
381	14FB	E1		POP	HL
382	14FC	220411		LD	(FILESTART),HL
383	14FF	CD2A00		CALL	LDATA
384	1502	38D2		JR	C,BADNEWS
385	1504	09		ADD	HL,BC
386	1505	22E112		LD	(EOFP),HL
387					

388	1508	ZADF12	HOWBIG:	LD	HL, (SOFF)
389	150B	CDF119		CALL	WORDSP
390	150E	2AE112		LD	HL, (EOFF)
391	1511	CDF119		CALL	WORDSP
392	1514	CD9D19		CALL	MEMTOP
393	1517	CDF119		CALL	WORDSP
394	151A	C31817		JP	CRLF
395					
396	151D	211817	SORT:	LD	HL, CRLF
397	1520	E5		PUSH	HL
398	1521	3AA411		LD	A, (TBUFF+1)
399	1524	F5		PUSH	AF
400	1525	CD801A		CALL	GETOPTION
401	1528	DD360201		LD	(IX+F3), 1
402	152C	F1		POP	AF
403	152D	4F		LD	C, A
404	152E	FE0D		CP	CR
405	1530	200B		JR	NZ, SCAN
406	1532	0E41		LD	C, 'A'
407	1534	CD3D15	SRT2:	CALL	SCAN
408	1537	0C		INC	C
409	1538	79		LD	A, C
410	1539	FE5A		CP	'Z'
411	153B	20F7		JR	NZ, SRT2
412	153D	213023	SCAN:	LD	HL, AEND-1 240A
413	1540	23	SCN1:	INC	HL
414	1541	23	SCN2:	INC	HL
415	1542	7E		LD	A, (HL)
416	1543	3C		INC	A
417	1544	CB		RET	Z
418	1545	CD951A		CALL	HOLD
419	1548	0600		LD	B, 0
420	154A	54		LD	D, H
421	154B	5D		LD	E, L
422	154C	04	SCN3:	INC	B
423	154D	CB7E		BIT	7, (HL)
424	154F	23		INC	HL
425	1550	28FA		JR	Z, SCN3
426	1552	1A		LD	A, (DE)
427	1553	B9		CP	C
428	1554	20EA		JR	NZ, SCN1
429	1556	DD3502		DEC	(IX+F3)
430	1559	2015		JR	NZ, SCN4
431	155B	CD1817		CALL	CRLF
432	155E	DD360204		LD	(IX+F3), 4
433	1562	DDCB004E		BIT	1, (IX+F1)
434	1566	2B03		JR	Z, SCN31
435	1568	DD3502		DEC	(IX+F3)
436	156B	D5	SCN31:	PUSH	DE
437	156C	CD5618		CALL	PAGE
438	156F	D1		POP	DE
439	1570	EB	SCN4:	EX	DE, HL
440	1571	C5		PUSH	BC
441	1572	D5		PUSH	DE
442	1573	50		LD	D, B
443	1574	0E7F		LD	C, 7FH
444	1576	CD91B		CALL	SYMFIELD
445	1579	E1		POP	HL
446	157A	C1		POP	BC
447	157B	5E		LD	E, (HL)

448	157C	23		INC	HL
449	157D	56		LD	D, (HL)
450	157E	EB		EX	DE, HL
451	157F	CD4119		CALL	WORDSP
452	1582	EB		EX	DE, HL
453	1583	18BC		JR	SCN2
454					
455	1585	3804	GOTO:	JR	C, GOT2
456	1587	ED432913		LD	(UPC), BC
457	158B	2E84	GOT2:	LD	L, M24 &255
458	158D	CD418		CALL	PARAMETER
459	1590	381F		JR	C, GOT3
460	1592	22F112		LD	(BKPTADDR), HL
461	1595	7E		LD	A, (HL)
462	1596	32F312		LD	(BKPTCODE), A
463	1599	36FF		LD	(HL), OFFH
464	159B	213810		LD	HL, 1038H
465	159E	11F412		LD	DE, CODE
466	15A1	7E		LD	A, (HL)
467	15A2	12		LD	(DE), A
468	15A3	36C3		LD	(HL), OC3H
469	15A5	23		INC	HL
470	15A6	13		INC	DE
471	15A7	7E		LD	A, (HL)
472	15A8	12		LD	(DE), A
473	15A9	3603		LD	(HL), REENTRY &255
474	15AB	23		INC	HL
475	15AC	13		INC	DE
476	15AD	7E		LD	A, (HL)
477	15AE	12		LD	(DE), A
478	15AF	3612		LD	(HL), REENTRY/256
479	15B1	310F13	GOT3:	LD	SP, IMAGE
480	15B4	E1		POP	HL
481	15B5	D1		POP	DE
482	15B6	C1		POP	BC
483	15B7	F1		POP	AF
484	15B8	08		EX	AF, AF
485	15B9	D9		EXX	
486	15BA	C1		POP	BC
487	15BB	79		LD	A, C
488	15BC	ED47		LD	I, A
489	15BE	78		LD	A, B
490	15BF	ED4F		LD	R, A
491	15C1	E1		POP	HL
492	15C2	D1		POP	DE
493	15C3	C1		POP	BC
494	15C4	F1		POP	AF
495	15C5	D9		EXX	
496	15C6	08		EX	AF, AF
497	15C7	DDE1		POP	IX
498	15C9	FDE1		POP	IY
499	15CB	C32513		JP	EXIT
500					
501	15CE	CD0919	COPY:	CALL	STARTSTOP
502	15D1	E5		PUSH	HL
503	15D2	2E90		LD	L, M27 &255
504	15D4	CD418		CALL	PARAMETER
505	15D7	EB		EX	DE, HL
506	15D8	C1		POP	BC
507	15D9	EDB0		LDIR	

508	15DB	C9		RET
509				
510	15DC	CD0919	FILL:	CALL STARTSTOP
511	15DF	E5		PUSH HL
512	15E0	2E96		LD L,M28 &255
513	15E2	CDF418		CALL PARAMETER
514	15E5	EB		EX DE,HL
515	15E6	C1		POP BC
516	15E7	73	FIL2:	LD (HL),E
517	15E8	23		INC HL
518	15E9	0B		DEC BC
519	15EA	7B		LD A,B
520	15EB	B1		OR C
521	15EC	20F9		JR NZ,FIL2
522	15EE	C9		RET
523				
524	15EF	3804	MODIFY:	JR C,MOD1
525	15F1	ED43E312		LD (CUROBJ),BC
526	15F5	2AE312	MOD1:	LD HL,(CUROBJ)
527	15F8	CD1817	MOD2:	CALL CRLF
528	15FB	CDF119		CALL WORDSP
529	15FE	22E312	MOD3:	LD (CUROBJ),HL
530	1601	7E		LD A,(HL)
531	1602	CDF619		CALL BYTESP
532	1605	EB		EX DE,HL
533	1606	CDC017		CALL USO
534	1609	FE2E		CP ','
535	160B	CA1817		JP Z,CRLF
536	160E	C5		PUSH BC
537	160F	CDF718		CALL PARAM1
538	1612	C1		POP BC
539	1613	EB		EX DE,HL
540	1614	3810		JR C,MOD5
541	1616	73		LD (HL),E
542	1617	79		LD A,C
543	1618	C602		ADD A,2
544	161A	47		LD B,A
545	161B	3E08	MOD4:	LD A,BS
546	161D	CD2217		CALL OUTPUT
547	1620	10F9		DJNZ MOD4
548	1622	7E		LD A,(HL)
549	1623	CDF619		CALL BYTESP
550	1626	23	MOD5:	INC HL
551	1627	7D		LD A,L
552	1628	E607		AND 7
553	162A	28CC		JR Z,MOD2
554	162C	18D0		JR MOD3
555				
556	162E	3804	QUERY:	JR C,QU2
557	1630	ED43E312		LD (CUROBJ),BC
558	1634	2AE312	QU2:	LD HL,(CUROBJ)
559	1637	7D		LD A,L
560	1638	E6F8		AND OF8H
561	163A	6F		LD L,A
562	163B	0E08		LD C,B
563	163D	0608	QU3:	LD B,B
564	163F	E5		PUSH HL
565	1640	CDF119		CALL WORDSP
566	1643	7E	QU4:	LD A,(HL)
567	1644	CDF619		CALL BYTESP

568	1647	23		INC	HL
569	1648	10F9		DJNZ	QU4
570	164A	E1		POP	HL
571	164B	CD2017		CALL	SPACE
572	164E	0608		LD	B, 8
573	1650	7E	QU5:	LD	A, (HL)
574	1651	FE11		CP	11H
575	1653	3002		JR	NC, QU7
576	1655	3E2E		LD	A, ','
577	1657	CD2217	QU7:	CALL	OUTPUT
578	165A	23		INC	HL
579	165B	10F3		DJNZ	QU5
580	165D	CD1817		CALL	CRLF
581	1660	0D		DEC	C
582	1661	20DA		JR	NZ, QU3
583	1663	22E312		LD	(CUROBJ), HL
584	1666	C9		RET	
585					
586	1667	211817	XAMINE:	LD	HL, CRLF
587	166A	E5		PUSH	HL
588	166B	2E9C		LD	L, M29&255
589	166D	CD1317		CALL	PR2
590	1670	210F13		LD	HL, IMAGE
591	1673	0605		LD	B, 5
592	1675	CD9516		CALL	PAIR
593	1678	CD1817		CALL	CRLF
594	167B	0604		LD	B, 4
595	167D	CD9516		CALL	PAIR
596	1680	CD1817		CALL	CRLF
597	1683	E5		PUSH	HL
598	1684	2EB4		LD	L, M30&255
599	1686	CD1317		CALL	PR2
600	1689	E1		POP	HL
601	168A	0602		LD	B, 2
602	168C	CD9516		CALL	PAIR
603	168F	23		INC	HL
604	1690	CD9416		CALL	ONEPAIR
605	1693	23		INC	HL
606	1694	04	ONEPAIR:	INC	B
607	1695	5E	PAIR:	LD	E, (HL)
608	1696	23		INC	HL
609	1697	56		LD	D, (HL)
610	1698	23		INC	HL
611	1699	EB		EX	DE, HL
612	169A	CDF119		CALL	WORDSP
613	169D	EB		EX	DE, HL
614	169E	10F5		DJNZ	PAIR
615	16A0	C9		RET	
616					
617	16A1	C5	OUTPORT:	PUSH	BC
618	16A2	2E96		LD	L, M28&255
619	16A4	CDF418		CALL	PARAMETER
620	16A7	C1		POP	BC
621	16AB	ED69		OUT	(C), L
622	16AA	C9		RET	
623					
624	16AB	ED78	INPORT:	IN	A, (C)
625	16AD	F5		PUSH	AF
626	16AE	CDF619		CALL	BYTESP
627	16B1	F1		POP	AF

628	16B2	0608		LD	B,B
629	16B4	07	IN2:	RLCA	
630	16B5	F5		PUSH	AF
631	16B6	E601		AND	1
632	16B8	C630		ADD	A,'0'
633	16BA	CD2217		CALL	OUTPUT
634	16BD	F1		POP	AF
635	16BE	10F4		DJNZ	IN2
636	16C0	C31817		JP	CRLF
637					
638	16C3	D5	COMTAB:	DB	'U'.S
639	16C4	B813		DW	UP
640	16C6	C9		DB	'I'.S
641	16C7	AB16		DW	INPORT
642	16C9	CF		DB	'O'.S
643	16CA	A116		DW	OUTPORT
644	16CC	D1		DB	'Q'.S
645	16CD	2E16		DW	QUERY
646	16CF	CD		DB	'M'.S
647	16D0	EF15		DW	MODIFY
648	16D2	C6		DB	'F'.S
649	16D3	DC15		DW	FILL
650	16D5	C3		DB	'C'.S
651	16D6	CE15		DW	COPY
652	16D8	C7		DB	'G'.S
653	16D9	8515		DW	GOTO
654	16DB	D8		DB	'X'.S
655	16DC	6716		DW	XAMINE
656	16DE	C1		DB	'A'.S
657	16DF	1C1A		DW	ASMB
658	16E1	CB		DB	'K'.S
659	16E2	C413		DW	KILL
660	16E4	CB		DB	'H'.S
661	16E5	0B15		DW	HOWBIG
662	16E7	C5		DB	'E'.S
663	16E8	3914		DW	ENTER
664	16EA	D4		DB	'T'.S
665	16EB	D713		DW	TARGET
666	16ED	CE		DB	'N'.S
667	16EE	5214		DW	NEW
668	16F0	C4		DB	'D'.S
669	16F1	DB13		DW	DOWN
670	16F3	DA		DB	'Z'.S
671	16F4	F313		DW	ZAP
672	16F6	D0		DB	'P'.S
673	16F7	1014		DW	PRINT
674	16F9	FF		DB	OFFH
675					
676	16FA	D5	EOF:	PUSH	DE
677	16FB	EB		EX	DE,HL
678	16FC	2AE112		LD	HL,(EOFF)
679	16FF	2B		DEC	HL
680	1700	B7		OR	A
681	1701	ED52		SBC	HL,DE
682	1703	EB		EX	DE,HL
683	1704	D1		POP	DE
684	1705	D0		RET	NC
685	1706	2E1E		LD	L,M5&255
686					
687	1708	ED7BE912	ERR:	LD	SP,(STK)

688	170C	DD360056	ERR2:	LD	(IX+F1), 'V'
689	1710	CDE502		CALL	BEEP
690					
691	1713	2612	PR2:	LD	H, M1/256
692	1715	CDAF17	PR3:	CALL	STR1
693	1718	F5	CRLF:	PUSH	AF
694	1719	3E0D		LD	A, CR
695	171B	CD2217		CALL	OUTPUT
696	171E	F1		POP	AF
697	171F	C9		RET	
698					
699	1720	3E20	SPACE:	LD	A, BLANK
700					
701	1722	DDCB004E	OUTPUT:	BIT	1, (IX+F1)
702	1726	282F		JR	Z, EXTERN
703	1728	FE0D	VIDEO:	CP	CR
704	172A	2004		JR	NZ, VID2
705	172C	3E0D		LD	A, OCDH
706	172E	180E		JR	VID4
707	1730	FE08	VID2:	CP	BS
708	1732	2004		JR	NZ, VID3
709	1734	3EC7		LD	A, OC7H
710	1736	1806		JR	VID4
711	1738	FE0C	VID3:	CP	FF
712	173A	2005		JR	NZ, VID5
713	173C	3EC6		LD	A, OC6H
714	173E	C3DC0D	VID4:	JP	CONTROL
715	1741	E5	VID5:	PUSH	HL
716	1742	CDB10F		CALL	SCREEN
717	1745	CDB90B		CALL	SPECIAL
718	1748	F5		PUSH	AF
719	1749	3A02E0	VID6:	LD	A, (0E002H)
720	174C	07		RLCA	
721	174D	38FA		JR	C, VID6
722	174F	F1		POP	AF
723	1750	77		LD	(HL), A
724	1751	217111		LD	HL, CURSOR
725	1754	34		INC	(HL)
726	1755	E1		POP	HL
727	1756	C9		RET	
728					
729	1757	00000000	EXTERN:	DB	0,0,0,0
730	1758	00000000		DB	0,0,0,0
731	175F	00000000		DB	0,0,0,0
732	1763	00000000		DB	0,0,0,0
733	1767	00000000		DB	0,0,0,0
734	176B	00000000		DB	0,0,0,0
735	176F	00000000		DB	0,0,0,0
736	1773	00000000		DB	0,0,0,0
737	1777	00000000		DB	0,0,0,0
738	177B	00000000		DB	0,0,0,0
739	177F	00000000		DB	0,0,0,0
740	1783	00000000		DB	0,0,0,0
741	1787	00000000		DB	0,0,0,0
742	178B	00000000		DB	0,0,0,0
743	178F	C9		RET	
744					
745	1790	CDDC0D	KB2:	CALL	CONTROL
746	1793	CDB309	KEYBOARD:	CALL	GETCHAR
747	1796	FEC9		CP	0C9H

748	1798	28F6		JR	Z,KB2
749	179A	FECA		CP	OCAH
750	179C	28F2		JR	Z,KB2
751	179E	CDCE0B		CALL	NORMAL
752	17A1	FE66		CP	66H
753	17A3	2002		JR	NZ,KB3
754	17A5	3E0D		LD	A,CR
755	17A7	FE60	KB3:	CP	60H
756	17A9	C0		RET	NZ
757	17AA	3E0B		LD	A,BS
758	17AC	C9		RET	
759					
760	17AD	2612	STRING:	LD	H,M1/256
761	17AF	7E	STR1:	LD	A,(HL)
762	17B0	FE0D		CP	CR
763	17B2	C8		RET	Z
764	17B3	CD2217		CALL	OUTPUT
765	17B6	23		INC	HL
766	17B7	18F6		JR	STR1
767					
768	17B9	CDAD17	CUE:	CALL	STRING
769	17BC	211817	USER:	LD	HL,CRLF
770	17BF	E5		PUSH	HL
771	17C0	21A311	US0:	LD	HL,TBUFF
772	17C3	010000		LD	BC,0
773	17C6	CD9317	US1:	CALL	KEYBOARD
774	17C9	77		LD	(HL),A
775	17CA	FE0B		CP	BS
776	17CC	2007		JR	NZ,US2
777	17CE	0D		DEC	C
778	17CF	FAC017		JP	M,US0
779	17D2	2B		DEC	HL
780	17D3	1812		JR	US4
781	17D5	0C	US2:	INC	C
782	17D6	FE0D		CP	CR
783	17D8	3AA311		LD	A,(TBUFF)
784	17DB	C8		RET	Z
785	17DC	0D		DEC	C
786	17DD	3A7111		LD	A,(CURSOR)
787	17E0	FE27		CP	39
788	17E2	28E2		JR	Z,US1
789	17E4	7E		LD	A,(HL)
790	17E5	0C		INC	C
791	17E6	23		INC	HL
792	17E7	CD2217	US4:	CALL	OUTPUT
793	17EA	18DA		JR	US1
794					
795	17EC	CD0919	DWRITE:	CALL	STARTSTOP
796	17EF	E5		PUSH	HL
797	17F0	2E8A		LD	L,M25&255
798	17F2	CDF418		CALL	PARAMETER
799	17F5	220611		LD	(FILEXEC),HL
800	17F8	2E22		LD	L,M6&255
801	17FA	CDF418		CALL	PARAMETER
802	17FD	EB		EX	DE,HL
803	17FE	E3		EX	(SP),HL
804	17FF	FDE1		POP	IY
805	1801	3E01		LD	A,1
806	1803	C9		RET	
807					

808	1804	11F010	GETNAME:	LD	DE, HBUFF
809	1807	12		LD	(DE), A
810	1808	2E71	GTN2:	LD	L, M21&255
811	180A	CDB917		CALL	CUE
812	180D	79		LD	A, C
813	180E	FE12		CP	18
814	1810	30F6		JR	NC, GTN2
815	1812	13		INC	DE
816	1813	21A311		LD	HL, TBUFF
817	1816	EDBO		LDIR	
818	1818	EB		EX	DE, HL
819	1819	2B		DEC	HL
820	181A	4F		LD	C, A
821	181B	0C		INC	C
822	181C	EDB8		LDDR	
823	181E	4F		LD	C, A
824	181F	C9		RET	
825					
826	1820	0D	FINDFILE:	DEC	C
827	1821	F5		PUSH	AF
828	1822	3E04		LD	A, 4
829	1824	2802		JR	Z, FL2
830	1826	3E01		LD	A, 1
831	1828	CD0418	FL2:	CALL	GETNAME
832	182B	CD2700	FL3:	CALL	LHEAD
833	182E	CD1817		CALL	CRLF
834	1831	DAD614		JP	C, BADNEWS
835	1834	2E30		LD	L, M8&255
836	1836	CDAD17		CALL	STRING
837	1839	21F010		LD	HL, HBUFF
838	183C	E5		PUSH	HL
839	183D	CDAF17		CALL	STR1
840	1840	E1		POP	HL
841	1841	11A311		LD	DE, TBUFF
842	1844	41		LD	B, C
843	1845	1001		DJNZ	FL4
844	1847	05		DEC	B
845	1848	04	FL4:	INC	B
846	1849	04		INC	B
847	184A	1A	FL5:	LD	A, (DE)
848	184B	BE		CP	(HL)
849	184C	20DD		JR	NZ, FL3
850	184E	23		INC	HL
851	184F	13		INC	DE
852	1850	10F8		DJNZ	FL5
853	1852	F1		POP	AF
854	1853	C31817		JP	CRLF
855					
856	1856	DD3503	PAGE:	DEC	(IX+F5)
857	1859	C0		RET	NZ
858	185A	3E3C		LD	A, 60
859	185C	DDCB004E		BIT	1, (IX+F1)
860	1860	2802		JR	Z, PG2
861	1862	3E16		LD	A, 22
862	1864	DD7703	PG2:	LD	(IX+F5, A
863	1867	CD5E19		CALL	DELAY
864	186A	E5		PUSH	HL
865	186B	2E19		LD	L, M4&255
866	186D	CDAD17		CALL	STRING
867	1870	2AD912		LD	HL, (LCT)

848	1873	E5		PUSH HL
849	1874	2A0712		LD HL, (PAGENO)
876	1877	23		INC HL
871	1878	22D712		LD (PAGENO), HL
871	187B	22D912		LD (LCT), HL
877	187E	CD0419		CALL POSITION
878	1881	E1		POP HL
878	1882	22D912		LD (LCT), HL
878	1885	E1		POP HL
877	1886	CD1817		CALL CRLF
878	1889	CD1817		JP CRLF
879				
88	188C	E3	TRAP:	EX (SP), HL
881	188D	2B		DEC HL
882	188E	222913		LD (UPC), HL
883	1891	E1		POP HL
884	1892	ED732613		LD (USP), SP
885	1896	312513		LD SP, EXIT
886	1899	FDE5		PUSH IY
887	189B	DDE5		PUSH IX
888	189D	08		EX AF, AF
889	189E	D9		EXX
890	189F	F5		PUSH AF
891	18A0	D5		PUSH BC
892	18A1	D5		PUSH DE
893	18A2	E5		PUSH HL
894	18A3	ED5F		LD A, R
895	18A5	47		LD B, A
896	18A6	ED57		LD A, I
897	18A8	4F		LD C, A
898	18A9	C5		PUSH BC
899	18AA	D9		EXX
900	18AB	08		EX AF, AF
901	18AC	F5		PUSH AF
902	18AD	C5		PUSH BC
903	18AE	D5		PUSH DE
904	18AF	E5		PUSH HL
905	18B0	2AF112		LD HL, (BKPTADDR)
906	18B3	ED5B2913		LD DE, (UPC)
907	18B7	B7		OR A
908	18B8	ED52		SBC HL, DE
909	18BA	2014		JR NZ, TRAP2
910	18BC	3AF312		LD A, (BKPTCODE)
911	18BF	12		LD (DE), A
912	18C0	113810		LD DE, 1038H
913	18C3	21F412		LD HL, CODE
914	18C6	010300		LD BC, 3
915	18C9	EDE0		LDIR
916	18CB	ED5B2913		LD DE, (UPC)
917	18CF	1B		DEC DE
918	18D0	13	TRAP2:	INC DE
919	18D1	ED532913		LD (UPC), DE
920	18D5	C32B13		JP ZEN
921				
922	18D8	E5	REMOVE:	PUSH HL
923	18D9	CDB619		CALL NEXT
924	18DC	E5		PUSH HL
925	18DD	2AE112		LD HL, (EOFF)
926	18E0	E5		PUSH HL
927	18E1	B7		OR A

928	18E2	ED42		SBC	HL, BC
929	18E4	22E112		LD	(EOFP), HL
930	18E7	E1		POP	HL
931	18E8	D1		POP	DE
932	18E9	D5		PUSH	DE
933	18EA	B7		OR	A
934	18EB	ED52		SBC	HL, DE
935	18ED	E3		EX	(SP), HL
936	18EE	C1		POP	BC
937	18EF	D1		POP	DE
938	18F0	C8		RET	Z
939	18F1	EDB0		LDIR	
940	18F3	C9		RET	
941					
942	18F4	CDB917	PARAMETER:	CALL	CUE
943	18F7	41	PARAM1:	LD	B, C
944	18F8	05		DEC	B
945	18F9	37		SCF	
946	18FA	C8		RET	Z
947	18FB	D5		PUSH	DE
948	18FC	11A311		LD	DE, TBUFF
949	18FF	CD1E19		CALL	CONVERT
950	1902	D1		POP	DE
951	1903	D0		RET	NC
952	1904	CD1817		CALL	CRLF
953	1907	1810		JR	E10
954					
955	1909	2E77	STARTSTOP:	LD	L, M22&255
956	190B	CDF418		CALL	PARAMETER
957	190E	EB		EX	DE, HL
958	190F	2E7E		LD	L, M23&255
959	1911	CDF418		CALL	PARAMETER
960	1914	B7		OR	A
961	1915	ED52		SBC	HL, DE
962	1917	23		INC	HL
963	1918	D0		RET	NC
964					
965	1919	2E0B	E10:	LD	L, M2&255
966	191B	C30817		JP	ERR
967					
968	191E	2B	CONVERT:	DEC	HL
969	191F	7E		LD	A, (HL)
970	1920	0E10		LD	C, 16
971	1922	FE48		CP	'H'
972	1924	2809		JR	Z, CV0
973	1926	0E08		LD	C, 8
974	1928	FE4F		CP	'0'
975	192A	2803		JR	Z, CV0
976	192C	0E0A		LD	C, 10
977	192E	04		INC	B
978	192F	05	CV0:	DEC	B
979	1930	210000		LD	HL, 0
980	1933	1A	CV1:	LD	A, (DE)
981	1934	D630		SUB	48
982	1936	FE0A		CP	10
983	1938	3805		JR	C, CV2
984	193A	D607		SUB	7
985	193C	FE0A		CP	10
986	193E	D8		RET	C
987	193F	B9	CV2:	CP	C

988	1940	3F		CCF
989	1941	D8		RET C
990	1942	D5		PUSH DE
991	1943	5D		LD E,L
992	1944	54		LD D,H
993	1945	CB49		BIT 1,C
994	1947	2008		JR NZ,CV3
995	1949	110000		LD DE,0
996	194C	CB59		BIT 3,C
997	194E	2001		JR NZ,CV3
998	1950	29		ADD HL,HL
999	1951	29	CV3:	ADD HL,HL
1000	1952	29		ADD HL,HL
1001	1953	19		ADD HL,DE
1002	1954	29		ADD HL,HL
1003	1955	5F		LD E,A
1004	1956	1600		LD D,0
1005	1958	19		ADD HL,DE
1006	1959	D1		POP DE
1007	195A	13		INC DE
1008	195B	10D6		DJNZ CV1
1009	195D	C9		RET
1010				
1011	195E	11204E	DELAY:	LD DE,20000
1012	1961	CD951A	DEL1:	CALL HOLD
1013	1964	1B		DEC DE
1014	1965	7A		LD A,D
1015	1966	B3		OR E
1016	1967	20F8		JR NZ,DEL1
1017	1969	DDCB005E		BIT 3,(IX+F1)
1018	196D	CC9317		CALL Z,KEYBOARD
1019	1970	FE51		CP 'Q'
1020	1972	CA2B13		JP Z,ZEN
1021	1975	DDCB00DE		SET 3,(IX+F1)
1022	1979	3E0C	CLEAR:	LD A,FF
1023	197B	C32217		JP OUTPUT
1024				
1025	197E	D5	SOF:	PUSH DE
1026	197F	EB		EX DE,HL
1027	1980	2ADF12		LD HL,(SOF)
1028	1983	B7		OR A
1029	1984	ED52		SBC HL,DE
1030	1986	EB		EX DE,HL
1031	1987	D1		POP DE
1032	1988	C9		RET
1033				
1034	1989	D5	MEMCHECK:	PUSH DE
1035	198A	09		ADD HL,BC
1036	198B	EB		EX DE,HL
1037	198C	CD9D19		CALL MEMTOP
1038	198F	B7		OR A
1039	1990	ED52		SBC HL,DE
1040	1992	EB		EX DE,HL
1041	1993	D1		POP DE
1042	1994	D0		RET NC
1043	1995	CDF119		CALL WORDSP
1044	1998	2E40		LD L,M20&255
1045	199A	C30817		JP ERR - 2232
1046				
1047	199D	2ADB12	MEMTOP:	LD HL,(LIMIT)

1048	19A0	7C		LD	A,H
1049	19A1	B5		OR	L
1050	19A2	C0		RET	NZ
1051	19A3	21FF23		LD	HL,AEND,OFFH
1052	19A6	24	MEM2:	INC	H
1053	19A7	7E		LD	A,(HL)
1054	19A8	2F		CPL	
1055	19A9	77		LD	(HL),A
1056	19AA	BE		CP	(HL)
1057	19AB	2F		CPL	
1058	19AC	77		LD	(HL),A
1059	19AD	2005		JR	NZ,MEM3
1060	19AF	7C		LD	A,H
1061	19B0	FED0		CP	ODOH
1062	19B2	20F2		JR	NZ,MEM2
1063	19B4	25	MEM3:	DEC	H
1064	19B5	C9		RET	
1065					
1066	19B6	CDFA16	NEXT:	CALL	EOF
1067	19B9	010000		LD	BC,0
1068	19BC	7E	NX1:	LD	A,(HL)
1069	19BD	23		INC	HL
1070	19BE	03		INC	BC
1071	19BF	FE0D		CP	CR
1072	19C1	20F9		JR	NZ,NX1
1073	19C3	C9		RET	
1074					
1075	19C4	E5	POSITION:	PUSH	HL
1076	19C5	C5		PUSH	BC
1077	19C6	21C711		LD	HL,TBUFF+36
1078	19C9	E5		PUSH	HL
1079	19CA	0605		LD	B,5
1080	19CC	3620	POS1:	LD	(HL),BLANK
1081	19CE	23		INC	HL
1082	19CF	10FB		DJNZ	POS1
1083	19D1	360D		LD	(HL),CR
1084	19D3	EB		EX	DE,HL
1085	19D4	1B		DEC	DE
1086	19D5	010A00		LD	BC,10
1087	19D8	2AD912		LD	HL,(LCT)
1088	19DB	1B	POS2:	DEC	DE
1089	19DC	D5		PUSH	DE
1090	19DD	EB		EX	DE,HL
1091	19DE	CD9A1D		CALL	MAS0
1092	19E1	7B		LD	A,E
1093	19E2	D1		POP	DE
1094	19E3	C630		ADD	A,'0'
1095	19E5	12		LD	(DE),A
1096	19E6	7D		LD	A,L
1097	19E7	B4		OR	H
1098	19E8	20F1		JR	NZ,POS2
1099	19EA	E1		POP	HL
1100	19EB	CDAF17		CALL	STR1
1101	19EE	C1		POP	BC
1102	19EF	E1		POP	HL
1103	19F0	C9		RET	
1104					
1105	19F1	7C	WORDSP:	LD	A,H
1106	19F2	CDFB19		CALL	BYTE
1107	19F5	7D		LD	A,L

1108	19F6	E5	BYTESP:	PUSH	HL
1109	19F7	212017		LD	HL,SPACE
1110	19FA	E3		EX	(SP),HL
1111	19FB	F5	BYTE:	PUSH	AF
1112	19FC	0F		RRCA	
1113	19FD	0F		RRCA	
1114	19FE	0F		RRCA	
1115	19FF	0F		RRCA	
1116	1A00	C0041A		CALL	NYB
1117	1A03	F1		POP	AF
1118	1A04	E60F	NYB:	AND	0FH
1119	1A06	C690		ADD	A,90H
1120	1A08	27		DAA	
1121	1A09	CE40		ADC	A,40H
1122	1A0B	27		DAA	
1123	1A0C	C32217		JF	OUTPUT
1124					
1125	1A0F	22DD12	UPDATE:	LD	(CURRENT),HL
1126	1A12	E5	LINC:	PUSH	HL
1127	1A13	2AD912		LD	HL,(LCT)
1128	1A16	23		INC	HL
1129	1A17	22D912		LD	(LCT),HL
1130	1A1A	E1		POP	HL
1131	1A1B	C9		RET	
1132					
1133			; TABLE LENGTHS		
1134					
1135			JL:	EQU	3
1136			CL:	EQU	1
1137			TL:	EQU	16
1138			LL:	EQU	21
1139			AL:	EQU	2
1140			SBL:	EQU	2
1141			ADL:	EQU	4
1142			INL:	EQU	3
1143			OL:	EQU	3
1144			XL:	EQU	4
1145					
1146			S:	EQU	80H
1147					
1148			; REGISTER PAIR IDENTIFIERS		
1149					
1150			IBC:	EQU	0
1151			IDE:	EQU	2
1152			IHL:	EQU	4
1153			IAF:	EQU	0EH
1154			ISP:	EQU	6
1155					
1156			; REGISTER IDENTIFIERS		
1157					
1158			IB:	EQU	0
1159			IC:	EQU	1
1160			ID:	EQU	2
1161			IE:	EQU	3
1162			IH:	EQU	4
1163			IL:	EQU	5
1164			IA:	EQU	7
1165					
1166			IIX:	EQU	ODDH
1167			IY:	EQU	OFDH

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1168
1169      IREF:      EQU  8
1170      IINT:      EQU  0
1171
1172      ; CONDITION CODE IDENTIFIERS
1173
1174      ICY:        EQU 18H
1175      INCY:       EQU 10H
1176      IZ:         EQU  8
1177      INZ:        EQU  0
1178      IPO:        EQU 20H
1179      IPE:        EQU 28H
1180      IMIN:       EQU 38H
1181      IPOS:       EQU 30H
1182
1183      ; PARSER EXIT TOKENS
1184
1185      TR:         EQU  0
1186      RI:         EQU  4
1187      RP:         EQU  1
1188      RPI:        EQU  5
1189      XY:         EQU  2
1190      XYI:        EQU  6
1191      NO:         EQU  3
1192      NOI:        EQU  7
1193      RE:         EQU  8
1194      CC:         EQU  9
1195      XYD:        EQU 10
1196      TCR:        EQU 11
1197
1198      ; INTERMEDIATE TOKENS
1199
1200      TALPHA:     EQU 30H
1201      TLAB:       EQU 31H
1202      TOPD:       EQU 32H
1203      TCOM:       EQU 33H
1204      TIND:       EQU 34H
1205      TADD:       EQU 40H
1206      TSUB:       EQU 0COH
1207      TMUL:       EQU 80H
1208      TDIV:       EQU 81H
1209      TAND:       EQU 82H
1210      TOR:        EQU 83H
1211      TDEF:       EQU 35H
1212      TLIT:       EQU 36H
1213
1214      ; TWO PASS ASSEMBLER
1215
1216 1A1C CD801A  ASMB:      CALL GETOPTION
1217 1A1F 213223      LD      HL,AEND+1 246C
1218 1A22 36FF        LD      (HL),OFFH
1219 1A24 22E712      LD      (FEP),HL
1220 1A27 CD2E1A      CALL PASS
1221 1A2A DDCB00AE    RES  5,(IX+F1)
1222
1223 1A2E CDCA13  PASS:      CALL TOP
1224 1A31 CD951A  PS1:      CALL HOLD
1225 1A34 2ADD12      LD      HL,(CURRENT)
1226 1A37 22E512      LD      (TEMP),HL
1227 1A3A 2AED12      LD      HL,(PC)

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1228	1A3D	E5		PUSH	HL
1229	1A3E	210000		LD	HL,0
1230	1A41	22CB12		LD	(FLAGS+F2),HL
1231	1A44	22CB12		LD	(FLAGS+F6),HL
1232	1A47	CD5E1E		CALL	CLASS
1233	1A4A	FE31		CP	TLAB
1234	1A4C	DCA51A		CALL	Z,SYMBOL
1235	1A4F	FE0B		CP	TCR
1236	1A51	2B19		JR	Z,PS2
1237	1A53	FE30		CP	TALPHA
1238	1A55	2024		JR	NZ,E1
1239	1A57	CD501C		CALL	OPTSCH
1240	1A5A	381F		JR	C,E1
1241	1A5C	DD7104		LD	(IX+F6),C
1242	1A5F	CD991A		CALL	JUMP
1243	1A62	C2A41C		JP	NZ,E6
1244	1A65	CDEF1C		CALL	PARSER
1245	1A68	FE0B		CP	TCR
1246	1A6A	200F		JR	NZ,E1
1247	1A6C	E1	PS2:	POP	HL
1248	1A6D	DDCB006E		BIT	5,(IX+F1)
1249	1A71	CC731B		CALL	Z,LIST
1250	1A74	CD121A		CALL	LINC
1251	1A77	04		INC	B
1252	1A78	20B7		JR	NZ,PS1
1253	1A7A	C9		RET	
1254					
1255	1A7B	2E0B	E1:	LD	L,M2&255
1256	1A7D	C30314		JP	ER
1257					
1258	1A80	2E2B	GETOPTION:	LD	L,M7&255
1259	1A82	CDB917		CALL	CUE
1260	1A85	F6BB		OR	OB8H
1261	1A87	DD7700		LD	(IX+F1),A
1262	1A8A	DD360301		LD	(IX+F5),1
1263	1A8E	210000		LD	HL,0
1264	1A91	22D712		LD	(PAGE0),HL
1265	1A94	C9		RET	
1266					
1267	1A95	CD440A	HOLD:	CALL	BREAK
1268	1A98	C0		RET	NZ
1269	1A99	DDCB0076		BIT	6,(IX+F1)
1270	1A9D	CA2E13		JP	Z,ZEN
1271	1AA0	DDCB009E		RES	3,(IX+F1)
1272	1AA4	C9		RET	
1273					
1274	1AA5	DDCB01CE	SYMBOL:	SET	1,(IX+F2)
1275	1AA9	0C		INC	C
1276	1AAA	DD7105		LD	(IX+F7),C
1277	1AAD	0D		DEC	C
1278	1AAE	CA0114		JP	Z,E0
1279	1AB1	CD3D1C		CALL	SYMSCH
1280	1AB4	FD22EB12		LD	(LBLP),IY
1281	1ABB	DDCB006E		BIT	5,(IX+F1)
1282	1ABC	2B3B		JR	Z,SY2
1283	1ABE	2E4C		LD	L,M13&255
1284	1AC0	D20314		JP	NC,ER
1285	1AC3	CD421C		CALL	OPDSCH
1286	1AC6	2E37		LD	L,M12&255
1287	1AC8	D20314		JP	NC,ER

1288	1ACB	2AE712		LD	HL, (FEP)
1289	1ACE	E5		PUSH	HL
1290	1ACF	0600		LD	B, 0
1291	1AD1	09		ADD	HL, BC
1292	1AD2	23		INC	HL
1293	1AD3	23		INC	HL
1294	1AD4	23		INC	HL
1295	1AD5	CD7E19		CALL	SOF
1296	1AD8	2E47		LD	L, M14&255
1297	1ADA	DA0314		JP	C, ER
1298	1ADD	E1		POP	HL
1299	1ADE	EB		EX	DE, HL
1300	1ADF	EDB0		LDIR	
1301	1AE1	EB		EX	DE, HL
1302	1AE2	2B		DEC	HL
1303	1AE3	CBFE		SET	7, (HL)
1304	1AE5	C1		POP	BC
1305	1AE6	D1		POP	DE
1306	1AE7	D5		PUSH	DE
1307	1AE8	C5		PUSH	BC
1308	1AE9	23		INC	HL
1309	1AEA	73		LD	(HL), E
1310	1AEB	23		INC	HL
1311	1AEC	72		LD	(HL), D
1312	1AED	22EB12		LD	(LBLP), HL
1313	1AF0	23		INC	HL
1314	1AF1	36FF		LD	(HL), OFFH
1315	1AF3	22E712		LD	(FEP), HL
1316	1AF6	C35E1E	SY2:	JP	CLASS
1317					
1318	1AF9	44	JUMP:	LD	B, H
1319	1AFA	CB7D		BIT	7, L
1320	1AFC	2004		JR	NZ, JP2
1321	1AFE	DDCB01DE		SET	3, (IX+F2)
1322	1B02	CBBD	JP2:	RES	7, L
1323	1B04	5D		LD	E, L
1324	1B05	1600		LD	D, 0
1325	1B07	7D		LD	A, L
1326	1B08	213B1B		LD	HL, JPTAB
1327	1B0B	19		ADD	HL, DE
1328	1B0C	5E		LD	E, (HL)
1329	1B0D	23		INC	HL
1330	1B0E	56		LD	D, (HL)
1331	1B0F	D5		PUSH	DE
1332	1B10	FE05		CP	5
1333	1B12	D8		RET	C
1334	1B13	FE25		CP	37
1335	1B15	DAEF1C		JP	C, PARSER
1336	1B18	CDEF1C		CALL	PARSER
1337	1B1B	E5		PUSH	HL
1338	1B1C	F5		PUSH	AF
1339	1B1D	CDEF1C		CALL	PARSER
1340	1B20	4F		LD	C, A
1341	1B21	F1		POP	AF
1342	1B22	EB		EX	DE, HL
1343	1B23	E1		POP	HL
1344	1B24	07		RLCA	
1345	1B25	07		RLCA	
1346	1B26	07		RLCA	
1347	1B27	07		RLCA	

1348	1B28	B1		OR	C
1349	1B29	4F		LD	C,A
1350	1B2A	FDE1		POP	IY
1351	1B2C	CDOF1E		CALL	FIND
1352	1B2F	47		LD	B,A
1353	1B30	2B01		JR	Z,JP3
1354	1B32	EB		EX	DE,HL
1355	1B33	7D	JP3:	LD	A,L
1356	1B34	07		RLCA	
1357	1B35	07		RLCA	
1358	1B36	07		RLCA	
1359	1B37	07		RLCA	
1360	1B38	B3		OR	E
1361	1B39	FDE9		JP	(IY)
1362					
1363	1B3B	C01C	JPTAB:	DW	MOFB
1364	1B3D	B51F		DW	L30
1365	1B3F	5E1F		DW	ENDH
1366	1B41	2120		DW	RSTH
1367	1B43	2E20		DW	RETH
1368	1B45	6320		DW	PPH
1369	1B47	D11E		DW	JRH
1370	1B49	DF1E		DW	DJH
1371	1B4B	8F20		DW	INCH
1372	1B4D	EE20		DW	ML1
1373	1B4F	2521		DW	SRH
1374	1B51	1321		DW	BITH
1375	1B53	FE1E		DW	DWH
1376	1B55	041F		DW	DBH
1377	1B57	211F		DW	DSH
1378	1B59	511F		DW	EQUH
1379	1B5B	401F		DW	ORGH
1380	1B5D	7B20		DW	IMH
1381	1B5F	341F		DW	LOADH
1382	1B61	601F		DW	LTAB
1383	1B63	4D20		DW	CALTAB
1384	1B65	3B20		DW	JMPTAB
1385	1B67	6321		DW	XTAB
1386	1B69	3E21		DW	INTAB
1387	1B6B	B720		DW	ADDTAB
1388	1B6D	A920		DW	ADCTAB
1389	1B6F	B020		DW	SBCTAB
1390	1B71	4B21		DW	OUTAB
1391					
1392	1B73	DDCB0076	LIST:	BIT	6,(IX+F1)
1393	1B77	C8		RET	Z
1394	1B78	C5		PUSH	BC
1395	1B79	DD4E02		LD	C,(IX+F3)
1396	1B7C	ED5BCE12		LD	DE,(FLAGS+F6)
1397	1B80	FD21A311		LD	IY,TBUFF
1398	1B84	D5	LS1:	PUSH	DE
1399	1B85	CD5618		CALL	PAGE
1400	1B88	CDC419		CALL	POSITION
1401	1B8B	D1		POP	DE
1402	1B8C	060E		LD	B,14
1403	1B8E	0C		INC	C
1404	1B8F	0D		DEC	C
1405	1B90	2B17		JR	Z,LS4
1406	1B92	CDF119		CALL	WORDSP
1407	1B95	0604		LD	B,4

1408	1897	FD7E00	LS2:	LD	A, (IY+0)
1409	1B9A	CDFB19		CALL	BYTE
1410	1B9D	FD23		INC	IY
1411	1B9F	23		INC	HL
1412	1BA0	0D		DEC	C
1413	1BA1	2803		JR	Z, LS3
1414	1BA3	10F2		DJNZ	LS2
1415	1BA5	04		INC	B
1416	1BA6	CB20	LS3:	SLA	B
1417	1BA8	05		DEC	B
1418	1BA9	CD2017	LS4:	CALL	SPACE
1419	1BAC	10FB		DJNZ	LS4
1420	1BAE	C5		PUSH	BC
1421	1BAF	E5		PUSH	HL
1422	1BB0	FDE5		PUSH	IY
1423	1BB2	FD21CD12		LD	IY, COMWIDTH
1424	1BB6	2AE512		LD	HL, (TEMP)
1425	1BB9	0EFF		LD	C, OFFH
1426	1BBB	DDCB0146		BIT	0, (IX+F2)
1427	1BBF	281A		JR	Z, LS7
1428	1BC1	CDF91B		CALL	SYMFIELD
1429	1BC4	53		LD	D, E
1430	1BC5	CDFD1B		CALL	FIELD
1431	1BC8	5A		LD	E, D
1432	1BC9	E5		PUSH	HL
1433	1BCA	7E	LS5:	LD	A, (HL)
1434	1BCB	FE0D		CP	CR
1435	1BCD	2808		JR	Z, LS6
1436	1BCF	FE3B		CP	3BH
1437	1BD1	2804		JR	Z, LS6
1438	1BD3	14		INC	D
1439	1BD4	23		INC	HL
1440	1BD5	18F3		JR	LS5
1441	1BD7	E1	LS6:	POP	HL
1442	1BD8	CDFD1B		CALL	FIELD
1443	1BDB	E5	LS7:	PUSH	HL
1444	1BDC	7E	LS8:	LD	A, (HL)
1445	1BDD	FE0D		CP	CR
1446	1BDF	2804		JR	Z, LS9
1447	1BE1	14		INC	D
1448	1BE2	23		INC	HL
1449	1BE3	18F7		JR	LS8
1450	1BE5	E1	LS9:	POP	HL
1451	1BE6	CDFD1B		CALL	FIELD
1452	1BE9	22E512		LD	(TEMP), HL
1453	1BEC	FDE1		POP	IY
1454	1BEE	E1		POP	HL
1455	1BEF	C1		POP	BC
1456	1BF0	CD1817		CALL	CRLF
1457	1BF3	0C		INC	C
1458	1BF4	0D		DEC	C
1459	1BF5	208D		JR	NZ, LS1
1460	1BF7	C1		POP	BC
1461	1BF8	C9		RET	
1462					
1463	1BF9	FD21CF12	SYMFIELD:	LD	IY, SYMWIDTH
1464	1BFD	FD4600	FIELD:	LD	B, (IY+0)
1465	1C00	DDCB004E		BIT	1, (IX+F1)
1466	1C04	2803		JR	Z, FD1
1467	1C06	FD4601		LD	B, (IY+1)

1468	1009	FD23	FD1:	INC	IY	
1469	100B	FD23		INC	IY	
1470	100D	7A		LD	A, D	
1471	100E	B8		CP	B	
1472	100F	3801		JR	C, FD2	
1478	1011	78		LD	A, B	
1479	1012	3C	FD2:	INC	A	
1479	1013	3D	FD3:	DEC	A	
1476	1014	280A		JR	Z, FD4	
1477	1016	F5		PUSH	AF	
1478	1017	7E		LD	A, (HL)	
1479	1018	A1		AND	C	
1480	1019	CD2217		CALL	OUTPUT	
1481	101C	F1		POP	AF	
1482	101D	23		INC	HL	
1483	101E	18F3		JR	FD3	
1484	1020	78	FD4:	LD	A, B	
1485	1021	92		SUB	D	
1486	1022	3004		JR	NC, FD6	
1487	1024	23	FD5:	INC	HL	
1488	1025	3C		INC	A	
1489	1026	20FC		JR	NZ, FD5	
1490	1028	7A	FD6:	LD	A, D	
1491	1029	90		SUB	B	
1492	102A	1600		LD	D, 0	
1493	102C	300B		JR	NC, FD8	
1494	102E	F5	FD7:	PUSH	AF	
1495	102F	CD2017		CALL	SPACE	
1496	1032	F1		POP	AF	
1497	1033	3C		INC	A	
1498	1034	20F8		JR	NZ, FD7	
1499	1036	7E	FD8:	LD	A, (HL)	
1500	1037	FE20		CP	BLANK	
1501	1039	C0		RET	NZ	
1502	103A	23		INC	HL	
1503	103B	18F9		JR	FD8	
1504						
1505	103D	213223	SYMSCH:	LD	HL, AEND+1	246C
1506	1040	182C		JR	SEARCH	
1507						
1508	1042	218421	OPDSCH:	LD	HL, CCODES	
1509	1045	DDCB015E		BIT	3, (IX+F2)	
1510	1049	2823		JR	Z, SEARCH	
1511	104B	21A021		LD	HL, REGS	
1512	104E	181E		JR	SEARCH	
1513						
1514	1050	21D821	OPTSCH:	LD	HL, KEYTB	
1515	1053	D5		PUSH	BC	
1516	1054	0E01		LD	C, 1	
1517	1056	CD6E1C		CALL	SEARCH	
1518	1059	C1		POP	BC	
1519	105A	23		INC	HL	
1520	105B	3811		JR	C, SEARCH	
1521	105D	13		INC	DE	
1522	105E	0D		DEC	C	
1523	105F	37		SCF		
1524	1060	C46E1C		CALL	NZ, SEARCH	
1525	1063	03		INC	BC	
1526	1064	1B		DEC	DE	
1527	1065	C9		RET		

1528			
1529	1C66	CB7E	BAD:
1530	1C68	23	BIT 7,(HL)
1531	1C69	28FB	INC HL
1532	1C6B	23	JR Z,BAD
1533	1C6C	23	INC HL
1534	1C6D	D1	INC HL
1535			POP DE
1536	1C6E	7E	SEARCH:
1537	1C6F	3C	LD A,(HL)
1538	1C70	37	INC A
1539	1C71	C8	SCF
1540	1C72	D5	RET Z
1541	1C73	41	PUSH DE
1542	1C74	1A	LD B,C
1543	1C75	1002	LD A,(DE)
1544	1C77	CBFF	DJNZ SC3
1545	1C79	04	SET 7,A
1546	1C7A	BE	INC B
1547	1C7B	20E9	CP (HL)
1548	1C7D	13	JR NZ,BAD
1549	1C7E	23	INC DE
1550	1C7F	10F3	INC HL
1551	1C81	5E	DJNZ SC2
1552	1C82	23	LD E,(HL)
1553	1C83	56	INC HL
1554	1C84	E3	LD D,(HL)
1555	1C85	EB	EX (SP),HL
1556	1C86	FDE1	EX DE,HL
1557	1C88	C9	POP IY
1558			RET
1559	1C89	FE03	RESOLV:
1560	1C8B	2017	CP NO
1561	1C8D	DD7E01	JR NZ,E6
1562	1C90	CB67	LD A,(IX+F2)
1563	1C92	C2FA1D	BIT 4,A
1564	1C95	CB4F	JP NZ,E7
1565	1C97	C9	BIT 1,A
1566			RET
1567	1C98	FE03	LITLE:
1568	1C9A	2008	CP NO
1569	1C9C	DDCB006E	JR NZ,E6
1570	1CA0	C0	LITLE2:
1571	1CA1	7C	BIT 5,(IX+F1)
1572	1CA2	B7	RET NZ
1573	1CA3	C8	LD A,H
1574	1CA4	2E5A	OR A
1575	1CA6	C30314	RET Z
1576			E6:
1577	1CA9	5D	LD L,M16&255
1578	1CAA	CB5B	JP ER
1579	1CAC	20F6	MOFMIX:
1580	1CAE	7B	LD E,L
1581	1CAF	07	MOFMX2:
1582	1CB0	07	BIT 3,E
1583	1CB1	07	JR NZ,E6
1584	1CB2	B0	LD A,E
1585	1CB3	180C	RLCA
1586	1CB5	3EED	RLCA
1587	1CB7	1808	RLCA
			OR B
			JR MOF
			MOFPRE:
			LD A,OEDH
			JR MOF

1588	1CB9	7D	MOFLH:	LD	A,L
1589	1CBA	CDC11C		CALL	MOF
1590	1CBD	7C	MOFH:	LD	A,H
1591	1CBE	1801		JR	MOF
1592	1CC0	78	MOFB:	LD	A,B
1593					
1594	1CC1	E5	MOF:	PUSH	HL
1595	1CC2	C5		PUSH	BC
1596	1CC3	CD6E1E		CALL	CL2
1597	1CC6	23		INC	HL
1598	1CC7	22ED12		LD	(PC),HL
1599	1CCA	DDCB006E		BIT	5,(IX+F1)
1600	1CCE	2018		JR	NZ,MOF5
1601	1CD0	DDCB0066		BIT	4,(IX+F1)
1602	1CD4	2008		JR	NZ,MOF2
1603	1CD6	2AEF12		LD	HL,(OBJ)
1604	1CD9	77		LD	(HL),A
1605	1CDA	23		INC	HL
1606	1CDB	22EF12		LD	(OBJ),HL
1607	1CDE	0600	MOF2:	LD	B,0
1608	1CE0	DD4E02		LD	C,(IX+F3)
1609	1CE3	21A311		LD	HL,TBUFF
1610	1CE6	09		ADD	HL,BC
1611	1CE7	77		LD	(HL),A
1612	1CE8	DD3402	MOF5:	INC	(IX+F3)
1613	1CEB	C1		POP	BC
1614	1CEC	E1		POP	HL
1615	1CED	AF		XOR	A
1616	1CEE	C9		RET	
1617					
1618	1CEF	DDCB0146	PARSER:	BIT	0,(IX+F2)
1619	1CF3	3E0B		LD	A,TCR
1620	1CF5	C0		RET	NZ
1621	1CF6	C5		PUSH	BC
1622	1CF7	CDFC1C		CALL	PA1
1623	1CFA	C1		POP	BC
1624	1CFB	C9		RET	
1625					
1626	1CFC	CDC91D	PA1:	CALL	TERM
1627	1CFF	D8		RET	C
1628	1D00	FE34		CP	TIND
1629	1D02	0600		LD	B,0
1630	1D04	2005		JR	NZ,PA2
1631	1D06	CDC91D		CALL	TERM
1632	1D09	0604		LD	B,4
1633	1D0B	FE32	PA2:	CP	TOPD
1634	1D0D	2031		JR	NZ,PA7
1635	1D0F	7C		LD	A,H
1636	1D10	B0		OR	B
1637	1D11	57		LD	D,A
1638	1D12	E5		PUSH	HL
1639	1D13	CDC91D		CALL	TERM
1640	1D16	E1		POP	HL
1641	1D17	4F		LD	C,A
1642	1D18	7A		LD	A,D
1643	1D19	D8		RET	C
1644	1D1A	FE06		CP	XYI
1645	1D1C	202F		JR	NZ,PER
1646	1D1E	CB71		BIT	6,C
1647	1D20	282B		JR	Z,PER

PA3: 19

1648	1D22	45		LD	B,L
1649	1D23	C5		PUSH	BC
1650	1D24	CDC91D		CALL	TERM
1651	1D27	CD501D		CALL	PA4
1652	1D2A	C1		POP	BC
1653	1D2B	CI9C1C		CALL	LITTLE2
1654	1D2E	200C		JR	NZ,PA3
1655	1D30	7D		LD	A,L
1656	1D31	CB79		BIT	7,C
1657	1D33	2803		JR	Z,PA31
1658	1D35	ED44		NEG	
1659	1D37	6F		LD	L,A
1660	1D38	A9	PA31:	XOR	C
1661	1D39	FAA41C		JP	M,E6
1662	1D3C	60	PA3:	LD	H,B
1663	1D3D	3E0A		LD	A,XYD
1664	1D3F	C9		RET	
1665					
1666	1D40	FE36	PA7:	CP	TLIT
1667	1D42	200C		JR	NZ,PA4
1668	1D44	B0		OR	B
1669	1D45	6F		LD	L,A
1670	1D46	E5		PUSH	HL
1671	1D47	CDC91D		CALL	TERM
1672	1D4A	E1		POP	HL
1673	1D4B	7D		LD	A,L
1674	1D4C	D8		RET	C
1675	1D4D	C3A41C	PER:	JP	E6
1676					
1677	1D50	FE03	PA4:	CP	NO
1678	1D52	20F9		JR	NZ,PER
1679	1D54	B0		OR	B
1680	1D55	F5		PUSH	AF
1681	1D56	E5	PA5:	PUSH	HL
1682	1D57	CDC91D		CALL	TERM
1683	1D5A	E1		POP	HL
1684	1D5B	3811		JR	C,PA6
1685	1D5D	F5		PUSH	AF
1686	1D5E	E5		PUSH	HL
1687	1D5F	CDC91D		CALL	TERM
1688	1D62	EB		EX	DE;HL
1689	1D63	E1		POP	HL
1690	1D64	FE03		CP	NO
1691	1D66	20E5		JR	NZ,PER
1692	1D68	F1		POP	AF
1693	1D69	CD701D		CALL	MATH
1694	1D6C	18E8		JR	PA5
1695	1D6E	F1	PA6:	POP	AF
1696	1D6F	C9		RET	
1697					
1698	1D70	FE40	MATH:	CP	TADD
1699	1D72	2002		JR	NZ,MA2
1700	1D74	19		ADD	HL,DE
1701	1D75	C9		RET	
1702	1D76	FEC0	MA2:	CP	TSUB
1703	1D78	2003		JR	NZ,MA3
1704	1D7A	ED52		SBC	HL,DE
1705	1D7C	C9		RET	
1706	1D7D	FE82	MA3:	CP	TAND
1707	1D7F	2007		JR	NZ,MA4

1708	1D81	7B		LD	A, E
1709	1D82	A5		AND	L
1710	1D83	6F		LD	L, A
1711	1D84	7A		LD	A, D
1712	1D85	A4		AND	H
1713	1D86	67		LD	H, A
1714	1D87	C9		RET	
1715					
1716	1D88	FE83	MA4:	CP	TCR
1717	1D8A	2007		JR	NZ, MA5
1718	1D8C	7B		LD	A, E
1719	1D8D	B5		OR	L
1720	1D8E	6F		LD	L, A
1721	1D8F	7A		LD	A, D
1722	1D90	B4		OR	H
1723	1D91	67		LD	H, A
1724	1D92	C9		RET	
1725					
1726	1D93	4B	MA5:	LD	C, E
1727	1D94	42		LD	B, D
1728	1D95	EB		EX	DE, HL
1729	1D96	FE81		CP	TDIV
1730	1D98	2018		JR	NZ, MA6
1731	1D9A	210000	MA50:	LD	HL, 0
1732	1D9D	3E11		LD	A, 17
1733	1D9F	B7		OR	A
1734	1DA0	ED6A	MA51:	ADC	HL, HL
1735	1DA2	ED42		SBC	HL, BC
1736	1DA4	3002		JR	NC, MA52
1737	1DA6	09		ADD	HL, BC
1738	1DA7	37		SCF	
1739	1DAB	3F	MA52:	CCF	
1740	1DA9	CB13		RL	E
1741	1DAB	CB12		RL	D
1742	1DAD	3D		DEC	A
1743	1DAE	20F0		JR	NZ, MA51
1744	1DB0	EB		EX	DE, HL
1745	1DB1	C9		RET	
1746					
1747	1DB2	FE80	MA6:	CP	TMUL
1748	1DB4	2097		JR	NZ, PER
1749	1DB6	210000		LD	HL, 0
1750	1DB9	3E10		LD	A, 16
1751	1DBB	CB38	MA61:	SRL	B
1752	1DBD	CB19		RR	C
1753	1DBF	3001		JR	NC, MA62
1754	1DC1	19		ADD	HL, DE
1755	1DC2	EB	MA62:	EX	DE, HL
1756	1DC3	29		ADD	HL, HL
1757	1DC4	EB		EX	DE, HL
1758	1DC5	3D		DEC	A
1759	1DC6	20F3		JR	NZ, MA61
1760	1DC8	C9		RET	
1761					
1762	1DC9	CD5E1E	TERM:	CALL	CLASS
1763	1DCC	FE31		CP	TLAB
1764	1DCE	CAA41C		JF	Z, E6
1765	1DD1	FE0B	TE2:	CP	TCR
1766	1DD3	2006		JR	NZ, TE3
1767	1DD5	DCCB01C6		SET	0, (IX+F2)

1768	1DD9	37		SCF
1769	1DDA	C9		RET
1770	1DDB	FE33	TE3:	CP TCOM
1771	1DDD	37		SCF
1772	1DDE	C8		RET Z
1773	1DDF	FE30		CP TALPHA
1774	1DE1	37		SCF
1775	1DE2	3F		CCF
1776	1DE3	C0		RET NZ
1777	1DE4	CD421C		CALL OPDSCH
1778	1DE7	3E32		LD A, TOPD
1779	1DE9	D0		RET NC
1780	1DEA	CD3D1C		CALL SYMSCH
1781	1DED	3E03		LD A, NO
1782	1DEF	D0		RET NC
1783	1DF0	3F		CCF
1784	1DF1	D0CB01E6		SET 4, (IX+F2)
1785	1DF5	D0CB006E		BIT 5, (IX+F1)
1786	1DF9	D0		RET NZ
1787	1DFA	2E62	E7:	LD L, M17&255
1788	1DFC	C30314		JP ER
1789				
1790	1DFF	2ADD12	TYPE:	LD HL, (CURRENT)
1791	1E02	CDFA16		CALL EOF
1792	1E05	23		INC HL
1793	1E06	22DD12		LD (CURRENT), HL
1794	1E09	2B		DEC HL
1795	1E0A	7E		LD A, (HL)
1796	1E0B	FD212D1E		LD IY, TYPTAB
1797				
1798	1E0F	D5	FIND:	PUSH DE
1799	1E10	FDE5		PUSH IY
1800	1E12	E3		EX (SP), HL
1801	1E13	5E		LD E, (HL)
1802	1E14	53		LD D, E
1803	1E15	23	FIN1:	INC HL
1804	1E16	BE		CP (HL)
1805	1E17	2803		JR Z, FIN2
1806	1E19	15		DEC D
1807	1E1A	20F9		JR NZ, FIN1
1808	1E1C	1600	FIN2:	LD D, 0
1809	1E1E	19		ADD HL, DE
1810	1E1F	7E		LD A, (HL)
1811	1E20	19		ADD HL, DE
1812	1E21	5F		LD E, A
1813	1E22	7E		LD A, (HL)
1814	1E23	CB7B		BIT 7, E
1815	1E25	CB8B		RES 7, E
1816	1E27	19		ADD HL, DE
1817	1E28	E3		EX (SP), HL
1818	1E29	FDE1		POP IY
1819	1E2B	D1		POP DE
1820	1E2C	C9		RET
1821				
1822	1E2D	100D27	TYPTAB:	DB TL, CR, " "
1823	1E30	242A2F2B		DB '\$*/+ -&. ()'
1823	1E34	2D262E28		
1823	1E38	29		
1824	1E39	3B3A222C		DB 3BH, ':', ','
1825	1E3D	00		DB 0

1826			
1827	1E3E	1F	DB CL3-\$-TL
1828	1E3F	2C	DB CL4-\$-TL
1829	1E40	1E	DB CL2-\$-TL
1830	1E41	1C	DB CL3-\$-TL
1831	1E42	1B	DB CL3-\$-TL
1832	1E43	1A	DB CL3-\$-TL
1833	1E44	19	DB CL3-\$-TL
1834	1E45	18	DB CL3-\$-TL
1835	1E46	17	DB CL3-\$-TL
1836	1E47	16	DB CL3-\$-TL
1837	1E48	06	DB CLASS-\$-TL
1838	1E49	0D	DB CL1-\$-TL
1839	1E4A	13	DB CL3-\$-TL
1840	1E4B	20	DB CL4-\$-TL
1841	1E4C	11	DB CL3-\$-TL
1842	1E4D	3B	DB CL5-\$-TL
1843			
1844	1E4E	0B000380	DB TCR, O, NO, TMUL, TDIV
1844	1E52	81	
1845	1E53	40C08283	DB TADD, TSUB, TAND, TOR
1846	1E57	34000031	DB TIND, O, O, TLAB
1847	1E5B	003335	DB O, TCOM, TDEF
1848			
1849	1E5E	CDFF1D CLASS:	CALL TYPE
1850	1E61	010021	LD BC, 2100H
1851	1E64	FDE9	JP (IY)
1852			
1853	1E66	CDFF1D CL1:	CALL TYPE
1854	1E69	FE0B	CP TCR
1855	1E6B	20F9	JR NZ, CL1
1856	1E6D	C9 CL3:	RET
1857	1E6E	2AED12 CL2:	LD HL, (PC)
1858	1E71	DDCB007E	BIT 7, (IX+F1)
1859	1E75	C8	RET Z
1860	1E76	2E6C E11:	LD L, M18&255
1861	1E78	C30314	JP ER
1862	1E7B	E5 CL4:	PUSH HL
1863	1E7C	46	LD B, (HL)
1864	1E7D	5E CL41:	LD E, (HL)
1865	1E7E	0C	INC C
1866	1E7F	CDFF1D	CALL TYPE
1867	1E82	FE0B	CP TCR
1868	1E84	282C	JR Z, CLER
1869	1E86	7E	LD A, (HL)
1870	1E87	B8	CP B
1871	1E88	20F3	JR NZ, CL41
1872	1E8A	EB	EX DE, HL
1873	1E8B	D1	POP DE
1874	1E8C	0D	DEC C
1875	1E8D	2823	JR Z, CLER
1876	1E8F	61	LD H, C
1877	1E90	3E03	LD A, NO
1878	1E92	25	DEC H
1879	1E93	C8	RET Z
1880	1E94	24	INC H
1881	1E95	3E36	LD A, TLIT
1882	1E97	C9	RET
1883			
1884	1E98	7E CL5:	LD A, (HL)

1885	1E99	B8		CP	B
1886	1E9A	38C2		JR	C, CLASS
1887	1E9C	FE30		CP	30H
1888	1E9E	3815		JR	C, CL7
1889	1EA0	FE3A		CP	3AH
1890	1EA2	3011		JR	NC, CL7
1891	1EA4	CDB51E	CL6:	CALL	CL7
1892	1EA7	FE31		CP	TLAB
1893	1EA9	2807		JR	Z, CLER
1894	1EAB	41		LD	B, C
1895	1EAC	CD1E19		CALL	CONVERT
1896	1EAF	3E03		LD	A, NO
1897	1EB1	00		RET	NC
1898	1EB2	C3A41C	CLER:	JP	E6
1899					
1900	1EB5	E5	CL7:	PUSH	HL
1901	1EB6	D1		POP	DE
1902	1EB7	CB7E	CL71:	BIT	7, (HL)
1903	1EB9	C27B1A		JP	NZ, E1
1904	1EBC	0C		INC	C
1905	1EBD	CDFF1D		CALL	TYPE
1906	1EC0	FE31		CP	TLAB
1907	1EC2	C8		RET	Z
1908	1EC3	FE35		CP	TDEF
1909	1EC5	2004		JR	NZ, CL72
1910	1EC7	7E		LD	A, (HL)
1911	1EC8	B8		CP	B
1912	1EC9	30EC		JR	NC, CL71
1913	1ECB	22DD12	CL72:	LD	(CURRENT), HL
1914	1ECE	3E30		LD	A, TALPHA
1915	1ED0	C9		RET	
1916					
1917	1ED1	FE09	JRH:	CP	CC
1918	1ED3	200A		JR	NZ, DJH
1919	1ED5	7D		LD	A, L
1920	1ED6	E6E7		AND	OE7H
1921	1ED8	CO		RET	NZ
1922	1ED9	45		LD	B, L
1923	1EDA	CBEB		SET	S, B
1924	1EDC	CDEF1C		CALL	PARSER
1925					
1926	1EDF	FE03	DJH:	CP	NO
1927	1EE1	CO		RET	NZ
1928	1EE2	CDC01C		CALL	MOFB
1929	1EE5	DDCB006E		BIT	5, (IX+F1)
1930	1EE9	200F		JR	NZ, DJ2
1931	1EEB	ED5BED12		LD	DE, (PC)
1932	1EEF	37		SCF	
1933	1EF0	ED52		SBC	HL, DE
1934	1EF2	7C		LD	A, H
1935	1EF3	24		INC	H
1936	1EF4	2802		JR	Z, DJ1
1937	1EF6	25		DEC	H
1938	1EF7	CO		RET	NZ
1939	1EF8	AD	DJ1:	XOR	L
1940	1EF9	F8		RET	M
1941	1EFA	7D	DJ2:	LD	A, L
1942	1EFB	C3C11C		JP	MOF
1943					
1944	1EFE	FE03	DWH:	CP	NO

1945	1F00	C0		RET	NZ	
1946	1F01	C3B91C		JP	MOFLH	
1947						
1948	1F04	FE36	DBH:	CP	TLIT	
1949	1F06	200A		JR	NZ, DBH3	
1950	1F08	13	DBH1:	INC	DE	
1951	1F09	1A		LD	A, (DE)	
1952	1F0A	CDC11C		CALL	MOF	
1953	1F0D	25		DEC	H	
1954	1F0E	20F8		JR	NZ, DBH1	
1955	1F10	1807		JR	DBH4	
1956						
1957	1F12	CD981C	DBH3:	CALL	LITLE	
1958	1F15	7D		LD	A, L	
1959	1F16	CDC11C		CALL	MOF	
1960	1F19	CDEF1C	DBH4:	CALL	PARSER	
1961	1F1C	FE0B		CP	TCR	
1962	1F1E	20E4		JR	NZ, DBH	
1963	1F20	C9		RET		
1964						
1965	1F21	CD891C	DSH:	CALL	RESOLV	
1966	1F24	EB		EX	DE, HL	
1967	1F25	2AED12		LD	HL, (PC)	
1968	1F28	19		ADD	HL, DE	
1969	1F29	22ED12		LD	(PC), HL	
1970	1F2C	2AEF12		LD	HL, (OBJ)	
1971	1F2F	19		ADD	HL, DE	
1972	1F30	22EF12		LD	(OBJ), HL	
1973	1F33	C9		RET		
1974						
1975	1F34	CD891C	LOADH:	CALL	RESOLV	
1976	1F37	22EF12	RES(4, IX+FI)	LD	(OBJ), HL	
1977	1F3A	DDCBO0A6	RES(4, IX+FI) →	RES	4, (IX+FI)	
1978	1F3E	AF	XOR A	XOR	A	
1979	1F3F	C9	RET	RET		
1980						
1981	1F40	CD891C	ORGH:	CALL	RESOLV	
1982	1F43	22ED12		LD	(PC), HL	
1983	1F46	DDCBO0E6		SET	4, (IX+FI)	
1984	1F4A	DDCBO0BE		RES	7, (IX+FI)	
1985	1F4E	2007		JR	NZ, EQ2	
1986	1F50	C9		RET		
1987						
1988	1F51	CD891C	EQUH:	CALL	RESOLV	
1989	1F54	CA0114		JP	Z, EO	
1990	1F57	EB	EQ2:	EX	DE, HL	
1991	1F58	2AEB12		LD	HL, (LBLP)	
1992	1F5B	72		LD	(HL), D	
1993	1F5C	2B		DEC	HL	
1994	1F5D	73		LD	(HL), E	
1995	1F5E	AF	ENDH:	XOR	A	
1996	1F5F	C9		RET		
1997						
1998	1F60	15	LTAB:	DB	LL	
1999	1F61	53		DB	RPI*16.NO	
2000	1F62	03		DB	TR*16.NO	
2001	1F63	80		DB	RE*16.TR	
2002	1F64	08		DB	TR*16.RE	
2003	1F65	00		DB	TR*16.TR	
2004	1F66	11		DB	RP*16.RP	

2005	1F67	72		DB	NOI*16.XY
2006	1F68	27		DB	XY*16.NOI
2007	1F69	23		DB	XY*16.NO
2008	1F6A	70		DB	NOI*16.TR
2009	1F6B	07		DB	TR*16.NOI
2010	1F6C	71		DB	NOI*16.RP
2011	1F6D	17		DB	RP*16.NOI
2012	1F6E	12		DB	RP*16.XY
2013	1F6F	A3		DB	XYD*16.NO
2014	1F70	13		DB	RP*16.NO
2015	1F71	A0		DB	XYD*16.TR
2016	1F72	0A		DB	TR*16.XYD
2017	1F73	50		DB	RPI*16.TR
2018	1F74	05		DB	TR*16.RPI
2019	1F75	00		DB	0
2020					
2021	1F76	95		DB	L1-\$-LL.S
2022	1F77	98		DB	L2-\$-LL.S
2023	1F78	21		DB	L3-\$-LL
2024	1F79	A0		DB	L3-\$-LL.S
2025	1F7A	AC		DB	L4-\$-LL.S
2026	1F7B	31		DB	L5-\$-LL
2027	1F7C	35		DB	L6-\$-LL
2028	1F7D	B4		DB	L6-\$-LL.S
2029	1F7E	B3		DB	L6-\$-LL.S
2030	1F7F	3C		DB	L7-\$-LL
2031	1F80	BB		DB	L7-\$-LL.S
2032	1F81	42		DB	L8-\$-LL
2033	1F82	C1		DB	L8-\$-LL.S
2034	1F83	D2		DB	L9-\$-LL.S
2035	1F84	D8		DB	LA-\$-LL.S
2036	1F85	DF		DB	LB-\$-LL.S
2037	1F86	63		DB	LC-\$-LL
2038	1F87	E2		DB	LC-\$-LL.S
2039	1F88	6A		DB	LE-\$-LL
2040	1F89	E9		DB	LE-\$-LL.S
2041	1F8A	36		DB	LER-\$-LL
2042					
2043	1F8B	16064757		DB	16H, 6, 47H, 57H, 40H
2043	1F8F	40			
2044	1F90	F9222A21		DB	0F9H, 22H, 2AH, 21H, 3
2044	1F94	32			
2045	1F95	3A222AF9		DB	3AH, 22H, 2AH, 0F9H, 3
2045	1F99	36			
2046	1F9A	01020A02		DB	1, 2, 0AH, 2, 0AH, 0
2046	1F9E	0A00			
2047					
2048	1FA0	7B	L1:	LD	A, E
2049	1FA1	FE04		CP	IHL
2050	1FA3	C0		RET	NZ
2051	1FA4	CD9C1C	L2:	CALL	LITTLE2
2052	1FA7	CDAA1C		CALL	MOFMX2
2053	1FAA	7D		LD	A, L
2054	1FAB	C3C11C	L21:	JP	MOF
2055					
2056	1FAE	7B	L3:	LD	A, E
2057	1FAF	FE07		CP	IA
2058	1FB1	C0		RET	NZ
2059	1FB2	7D		LD	A, L
2060	1FB3	80		OR	B

2061	1FB4	47		LD	B, A
2062	1FB5	CDB51C	L30:	CALL	MOFPRE
2063	1FB8	C3C01C	L31:	JP	MOFB
2064					
2065	1FBB	7D	L4:	LD	A, L
2066	1FBC	B0		OR	B
2067	1FBD	47		LD	B, A
2068	1FBE	C3AA1C		JP	MOFMX2
2069					
2070	1FC1	FE64	L5:	CP	ISP*16, IHL
2071	1FC3	C0		RET	NZ
2072	1FC4	18F2		JR	L31
2073					
2074	1FC6	7B	L6:	LD	A, E
2075	1FC7	CDC11C	L61:	CALL	MOF
2076	1FCA	CDC01C	L62:	CALL	MOFB
2077	1FCD	C3B91C	L63:	JP	MOFLH
2078					
2079	1FD0	7B	L7:	LD	A, E
2080	1FD1	FE07		CP	IA
2081	1FD3	28F5		JR	Z, L62
2082	1FD5	C3A41C	LER:	JP	E6
2083					
2084	1FD8	7B	L8:	LD	A, E
2085	1FD9	FE04		CP	IHL
2086	1FDB	28ED		JR	Z, L62
2087	1FDD	CDB51C		CALL	MOFPRE
2088	1FEO	7B		LD	A, B
2089	1FE1	EE61		XOR	61H
2090	1FE3	47		LD	B, A
2091	1FE4	CDAA1C		CALL	MOFMX2
2092	1FE7	C3B91C		JP	MOFLH
2093					
2094	1FEA	7B	L9:	LD	A, E
2095	1FEB	FE06		CP	ISP
2096	1FED	C0		RET	NZ
2097	1FEE	60		LD	H, B
2098	1FEF	18DC		JR	L63
2099					
2100	1FF1	CD9C1C	LA:	CALL	LITTLE2
2101	1FF4	7A		LD	A, D
2102	1FF5	65		LD	H, L
2103	1FF6	6B		LD	L, E
2104	1FF7	18CE		JR	L61
2105					
2106	1FF9	CDAA1C	LB:	CALL	MOFMX2
2107	1FFC	18CF		JR	L63
2108					
2109	1FFE	CDBD1C	LC:	CALL	MOFH
2110	2001	CD1520		CALL	LE1
2111	2004	7D		LD	A, L
2112	2005	18A4		JR	L21
2113					
2114	2007	FE07	LE:	CP	IBC*16, IA
2115	2009	28AD		JR	Z, L31
2116	200B	CBEO		SET	4, B
2117	200D	FE27		CP	IDE*16, IA
2118	200F	28A7		JR	Z, L31
2119	2011	7D		LD	A, L
2120	2012	FE04		CP	IHL

2121	2014	C0		RET	NZ
2122	2015	CB58	LE1:	RIT	3,B
2123	2017	0646		LD	B,46H
2124	2019	C2AA1C		JP	NZ,MOFMX2
2125	201C	7B		LD	A,E
2126	201D	F670		OR	70H
2127	201F	188A		JR	L21
2128					
2129	2021	CD981C	RSTH:	CALL	LITTLE
2130	2024	2003		JR	NZ,RST2
2131	2026	7D		LD	A,L
2132	2027	A0		AND	B
2133	2028	C0		RET	NZ
2134	2029	78	RST2:	LD	A,B
2135	202A	B5		OR	L
2136	202B	C3C11C		JP	MOF
2137					
2138	202E	FE09	RETH:	CP	CC
2139	2030	28F7		JR	Z,RST2
2140	2032	06C9		LD	B,OC9H
2141	2034	FE0B		CP	TCR
2142	2036	1811		JR	JMP21
2143					
2144	2038	03	JMPTAB:	DB	JL
2145	2039	6B		DB	XYI*16.TCR
2146	203A	5B		DB	RPI*16.TCR
2147	203B	00		DB	0
2148	203C	03		DB	JMP1-\$-JL
2149	203D	06		DB	JMP2-\$-JL
2150	203E	10		DB	JMP3-\$-JL
2151	203F	E9E9C3		DB	OE9H,OE9H,OC3H
2152					
2153	2042	60	JMP1:	LD	H,B
2154	2043	C3B91C		JP	MOFLH
2155	2046	7D	JMP2:	LD	A,L
2156	2047	FE04		CP	IHL
2157	2049	C0	JMP21:	RET	NZ
2158	204A	C3C01C		JP	MOFB
2159					
2160	204D	01	CALTAB:	DB	CL
2161	204E	00		DB	0
2162	204F	01		DB	JMP3-\$-CL
2163	2050	CD		DB	OCDH
2164					
2165	2051	79	JMP3:	LD	A,C
2166	2052	FE3B		CP	NO*16.TCR
2167	2054	CACA1F		JP	Z,L62
2168	2057	FE93		CP	CC*16.NO
2169	2059	C0		RET	NZ
2170	205A	78		LD	A,B
2171	205B	E6C6		AND	OC6H
2172	205D	B5		OR	L
2173	205E	47		LD	B,A
2174	205F	EB		EX	DE,HL
2175	2060	C3CA1F		JP	L62
2176					
2177	2063	FE01	PPH:	CP	RP
2178	2065	200B		JR	NZ,PF2
2179	2067	7D		LD	A,L
2180	2068	FE06		CP	ISP

2180	206A	CAA41C		JP	Z, E6
2182	206D	CB9D		RES	3, L
2183	206F	C3A91C		JP	MOFMIX
2184	2072	FE02	PP2:	CP	XY
2185	2074	C0		RET	NZ
2186	2075	CBEB	PP21:	SET	5, B
2187	2077	60		LD	H, B
2188	2078	C3B91C		JP	MOFLH
2189					
2190	207B	CD981C	IMH:	CALL	LITLE
2191	207E	2004		JR	NZ, IM2
2192	2080	3E02		LD	A, 2
2193	2082	95		SUB	L
2194	2083	DB		RET	C
2195	2084	118C20	IM2:	LD	DE, IMTAB
2196	2087	19		ADD	HL, DE
2197	2088	46		LD	B, (HL)
2198	2089	C3E51F		JP	L30
2199					
2200	208C	46565E	IMTAB:	DB	46H, 56H, 5EH
2201					
2202	208F	FE02	INCH:	CP	XY
2203	2091	2BE2		JR	Z, PP21
2204	2093	FE01		CP	RP
2205	2095	CAA91C		JP	Z, MOFMIX
2206	2098	CB58		BIT	3, B
2207	209A	0634		LD	B, 34H
2208	209C	2B01		JR	Z, INC2
2209	209E	04		INC	B
2210	209F	B7	INC2:	OR	A
2211	20A0	205A		JR	NZ, ML2
2212	20A2	7B		LD	A, B
2213	20A3	E6C7		AND	OC7H
2214	20A5	47		LD	B, A
2215	20A6	C3A91C		JP	MOFMIX
2216					
2217	20A9	02	ADCTAB:	DB	AL
2218	20AA	11		DB	RP*16, RP
2219	20AB	00		DB	0
2220	20AC	16		DB	DL1-\$-AL
2221	20AD	B3		DB	DL5-\$-AL, S
2222	20AE	4ABE		DB	4AH, 8EH
2223					
2224	20B0	02	SBCTAB:	DB	SBL
2225	20B1	11		DB	RP*16, RP
2226	20B2	00		DB	0
2227	20B3	0F		DB	DL1-\$-SBL
2228	20B4	AC		DB	DL5-\$-SBL, S
2229	20B5	429E		DB	42H, 9EH
2230					
2231	20B7	04	ADDTAB:	DB	ADL
2232	20B8	11		DB	RP*16, RP
2233	20B9	21		DB	XY*16, RP
2234	20BA	22		DB	XY*16, XY
2235	20BB	00		DB	0
2236	20BC	07		DB	DL2-\$-ADL
2237	20BD	0D		DB	DL3-\$-ADL
2238	20BE	19		DB	DL4-\$-ADL
2239	20BF	9F		DB	DL5-\$-ADL, S
2240	20C0	09092986		DB	9, 9, 29H, 86H

2241				
2242	20C4	CDB51C	DL1:	CALL MOFPRE
2243	20C7	7D	DL2:	LD A,L
2244	20C8	FE04		CP IHL
2245	20CA	C0		RET NZ
2246	20CB	C3AA1C		JP MOFMX2
2247				
2248	20CE	7B	DL3:	LD A,E
2249	20CF	FE04		CP IHL
2250	20D1	CAA41C		JP Z,E6
2251	20D4	7D		LD A,L
2252	20D5	CDC11C		CALL MOF
2253	20D8	C3AA1C		JP MOFMX2
2254				
2255	20DB	7B	DL4:	LD A,E
2256	20DC	BD		CP L
2257	20DD	60		LD H,B
2258	20DE	C0		RET NZ
2259	20DF	C3B91C		JP MOFLH
2260				
2261	20E2	79	DL5:	LD A,C
2262	20E3	E6F0		AND OFOH
2263	20E5	C0		RET NZ
2264	20E6	CB53		BIT 2,E
2265	20E8	CAA41C		JP Z,E6
2266	20EB	79		LD A,C
2267	20EC	E60F		AND OFH
2268				
2269	20EE	FE03	ML1:	CP NO
2270	20F0	200A		JR NZ,ML2
2271	20F2	CBF0		SET 6,B
2272	20F4	CD9C1C	ML11:	CALL LITLE2
2273	20F7	65	ML12:	LD H,L
2274	20F8	68		LD L,B
2275	20F9	C3B91C		JP MOFLH
2276				
2277	20FC	FE0A	ML2:	CP XYD
2278	20FE	2005		JR NZ,ML3
2279	2100	CDBD1C		CALL MOFH
2280	2103	18F2		JR ML12
2281				
2282	2105	FE05	ML3:	CP RPI
2283	2107	CA4620		JP Z,JMP2
2284	210A	B7		OR A
2285	210B	C0		RET NZ
2286	210C	7B		LD A,B
2287	210D	E6F8		AND OF8H
2288	210F	B5		OR L
2289	2110	C3C11C		JP MOF
2290				
2291	2113	CD981C	BITH:	CALL LITLE
2292	2116	2004		JR NZ,BIT2
2293	2118	3E07		LD A,7
2294	211A	95		SUB L
2295	211B	D8		RET C
2296	211C	7D	BIT2:	LD A,L
2297	211D	07		RLCA
2298	211E	07		RLCA
2299	211F	07		RLCA
2300	2120	B0		OR B

2121	47		LD	B,A
2122	CDEF1C		CALL	PARSER
2125	FE0A	SRH:	CP	XYD
2127	200C		JR	NZ,SR2
2129	E5		PUSH	HL
212A	6C		LD	L,H
212B	26CB		LD	H,OCBH
212D	CDB91C		CALL	MOFLH
2130	E1		POP	HL
2131	60		LD	H,B
2132	C3B91C		JP	MOFLH
2135	F5	SR2:	PUSH	AF
2136	3ECB		LD	A,OCBH
2138	CDC11C		CALL	MOF
213B	F1		POP	AF
213C	18C7		JR	ML3
213E	03	INTAB:	DB	INL
213F	07		DB	TR*16,NOI
2140	04		DB	TR*16,RI
2141	00		DB	0
2142	8D		DB	ID1-\$-INL,S
2143	93		DB	ID2-\$-INL,S
2144	19		DB	IOER-\$-INL
2145	DB4000		DB	ODBH,40H,0
2148	03	OUTAB:	DB	OL
2149	70		DB	NOI*16,TR
214A	40		DB	RI*16,TR
214B	00		DB	0
214C	03		DB	ID1-\$-OL
214D	09		DB	ID2-\$-OL
214E	0F		DB	IOER-\$-OL
214F	D34100		DB	OD3H,41H,0
2152	CB53	ID1:	BIT	2,E
2154	280A		JR	Z,IOER
2156	C3F420		JP	ML11
2159	CDB51C	ID2:	CALL	MOFPRE
215C	2D		DEC	L
215D	CAAA1C		JP	Z,MOFMX2
2160	C3A41C	IOER:	JP	E6
2163	04	XTAB:	DB	XL
2164	11		DB	RP*16,RP
2165	51		DB	RPI*16,RP
2166	52		DB	RPI*16,XY
2167	00		DB	0
2168	04		DB	X1-\$-XL
2169	11		DB	X2-\$-XL
216A	93		DB	X3-\$-XL,S
216B	0D		DB	XER-\$-XL
216C	EBE3E300		DB	OEBH,OE3H,OE3H,0
2170	FE24	X1:	CP	IDE*16,IHL
2172	CAC01C		JP	Z,MOFB
2175	0608		LD	B,B
2177	FEFE		CP	IAF*16,IAF

2361	2179	CAC01C		JP	Z,MOFB
2362	217C	18E2	XER:	JR	IOER
2363					
2364	217E	C3C11F	X2:	JP	L5
2365					
2366	2181	C3EA1F	X3:	JP	L9
2367					
2368	2184	C31809	CCODES:	DB	'C',S,ICY,CC
2369	2187	4EC31009		DB	'N','C',S,INCY,CC
2370	218B	DA0809		DB	'Z',S,IZ,CC
2371	218E	4EDA0009		DB	'N','Z',S,INZ,CC
2372	2192	D03009		DB	'P',S,IPOS,CC
2373	2195	CD3809		DB	'M',S,IMIN,CC
2374	2198	50CF2009		DB	'P','O',S,IPO,CC
2375	219C	50C52809		DB	'P','E',S,IPE,CC
2376					
2377	21A0	48CC0401	REGS:	DB	'H','L',S,IHL,RP
2378	21A4	44C50201		DB	'D','E',S,IDE,RP
2379	21A8	42C30001		DB	'B','C',S,IBC,RP
2380	21AC	41C60E01		DB	'A','F',S,IAF,RP
2381	21B0	53D00601		DB	'S','P',S,ISP,RP
2382	21B4	C10700		DB	'A',S,IA,TR
2383	21B7	C20000		DB	'B',S,IB,TR
2384	21BA	C30100		DB	'C',S,IC,TR
2385	21BD	C40200		DB	'D',S,ID,TR
2386	21C0	C50300		DB	'E',S,IE,TR
2387	21C3	C80400		DB	'H',S,IH,TR
2388	21C6	CC0500		DB	'L',S,IL,TR
2389	21C9	C90008		DB	'I',S,IINT,RE
2390	21CC	D20808		DB	'R',S,IREF,RE
2391	21CF	49D9FD02		DB	'I','Y',S,IY,XY
2392	21D3	49D8DD02		DB	'I','X',S,IIX,XY
2393	21D7	FF		DB	OFFH
2394					
2395	21D8	CC	KEYTB:	DB	'L',S
2396	21D9	2D22		DW	LOPS-1
2397	21DB	C3		DB	'C',S
2398	21DC	4822		DW	COPS-1
2399	21DE	C4		DB	'D',S
2400	21DF	6B22		DW	DOPS-1
2401	21E1	C9		DB	'I',S
2402	21E2	8522		DW	IOPS-1
2403	21E4	D3		DB	'S',S
2404	21E5	A222		DW	SOPS-1
2405	21E7	CF		DB	'O',S
2406	21E8	BF22		DW	OOPS-1
2407	21EA	C5		DB	'E',S
2408	21EB	DF22		DW	EQPS-1
2409	21ED	D2		DB	'R',S
2410	21EE	F222		DW	ROPS-1
2411	21F0	FF		DB	OFFH
2412					
2413	21F1	4AD0AA00		DB	'J','P',S,42,S,0
2414	21F5	4AD28C18		DB	'J','R',S,12,S,18H
2415	21F9	505553C8		DB	'PUS','H',S,10,OC5
2415	21FD	0AC5			
2416	21FF	504FD00A		DB	'PO','P',S,10,OC1H
2416	2203	C1			
2417	2204	4144C430		DB	'AD','D',S,48,0
2417	2208	00			

2418	2209	4144C332		DB	'AD','C'.S,50,0
2418	220D	00			
2419	220E	4249D416		DB	'BI','T'.S,22,46H
2419	2212	46			
2420	2213	584FD212		DB	'XD','R'.S,18,0AEH
2420	2217	AE			
2421	2218	414EC412		DB	'AN','D'.S,18,0A6H
2421	221C	A6			
2422	221D	4E4FD000		DB	'NO','P'.S,0,0
2422	2221	00			
2423	2222	4E45C702		DB	'NE','G'.S,2,44H
2423	2226	44			
2424	2227	4B414CD4		DB	'HAL','T'.S,0,76H
2424	222B	0076			
2425	222D	FF		DB	OFFH
2426					
2427	222E	C42600	LOPS:	DB	'D'.S,38,0
2428	2231	4F41C424		DB	'OA','D'.S,36,0
2428	2235	00			
2429	2236	44C902A0		DB	'D','I'.S,2,0A0H
2430	223A	4449D202		DB	'DI','R'.S,2,0B0H
2430	223E	B0			
2431	223F	44C402A8		DB	'D','D'.S,2,0ABH
2432	2243	4444D202		DB	'DD','R'.S,2,0BBH
2432	2247	BB			
2433	2248	FF		DB	OFFH
2434					
2435	2249	414CCCA8	COFS:	DB	'AL','L'.S,40,S,0
2435	224D	00			
2436	224E	D012BE		DB	'P'.S,18,0BEH
2437	2251	48C6003F		DB	'C','F'.S,0,3FH
2438	2255	50CC002F		DB	'P','L'.S,0,2FH
2439	2259	50C902A1		DB	'P','I'.S,2,0A1H
2440	225D	5049D202		DB	'PI','R'.S,2,0B1H
2440	2261	B1			
2441	2262	50C402A9		DB	'P','D'.S,2,0A9H
2442	2266	5044D202		DB	'PD','R'.S,2,0B9H
2442	226A	B9			
2443	226B	FF		DB	OFFH
2444					
2445	226C	45C3100B	DOFS:	DB	'E','C'.S,16,0BH
2446	2270	4A4EDA0E		DB	'JN','Z'.S,14,10H
2446	2274	10			
2447	2275	C21A00		DB	'B'.S,26,0
2448	2278	D71800		DB	'W'.S,24,0
2449	227B	D31C00		DB	'S'.S,28,0
2450	227E	41C10027		DB	'A','A'.S,0,27H
2451	2282	C900F3		DB	'I'.S,0,0F3H
2452	2285	FF		DB	OFFH
2453					
2454	2286	4EC31003	IOFS:	DB	'N','C'.S,16,3
2455	228A	CD2200		DB	'M'.S,34,0
2456	228D	CE2E00		DB	'N'.S,46,0
2457	2290	4EC902A2		DB	'N','I'.S,2,0A2H
2458	2294	4E49D202		DB	'NI','R'.S,2,0B2H
2458	2298	B2			
2459	2299	4EC402AA		DB	'N','D'.S,2,0AAH
2460	229D	4E44D202		DB	'ND','R'.S,2,0BAH
2460	22A1	BA			
2461	22A2	FF		DB	OFFH

2462					
2463	22A3	42C33400	SQPS:	DB	'B','C',S,52,0
2464	22A7	43C60037		DB	'C','F',S,0,37H
2465	22AB	4CC11426		DB	'L','A',S,20,26H
2466	22AF	52C1142E		DB	'R','A',S,20,2EH
2467	22B3	52CC143E		DB	'R','L',S,20,3EH
2468	22B7	45D416C6		DB	'E','T',S,22,0C6H
2469	22BB	55C21296		DB	'U','B',S,18,96H
2470	22BF	FF		DB	OFFH
2471					
2472	22C0	D212B6	OOPS:	DB	'R',S,18,0B6H
2473	22C3	52C72000		DB	'R','G',S,32,0
2474	22C7	55D43600		DB	'U','T',S,54,0
2475	22CB	5554C902		DB	'UT','I',S,2,0A3H
2475	22CF	A3			
2476	22D0	5449D202		DB	'TI','R',S,2,0B3H
2476	22D4	B3			
2477	22D5	5554C402		DB	'UT','D',S,2,0ABH
2477	22D9	AB			
2478	22DA	5444D202		DB	'TD','R',S,2,0BBH
2478	22DE	BB			
2479	22DF	FF		DB	OFFH
2480					
2481	22E0	D82C00	EOPS:	DB	'X',S,44,0
2482	22E3	58D800D9		DB	'X','X',S,0,0D9H
2483	22E7	51D51E00		DB	'Q','U',S,30,0
2484	22EB	C900FB		DB	'I',S,0,0FBH
2485	22EE	4EC404FF		DB	'N','D',S,4,OFFH
2486	22F2	FF		DB	OFFH
2487					
2488					
2489	22F3	45D488C0	ROPS:	DB	'E','T',S,8,S,0C0H
2490	22F7	53D406C7		DB	'S','T',S,6,0C7H
2491	22FB	45D31686		DB	'E','S',S,22,86H
2492	22FF	CC1416		DB	'L',S,20,16H
2493	2302	4CC31406		DB	'L','C',S,20,6
2494	2306	4C43C100		DB	'LC','A',S,0,7
2494	230A	07			
2495	230B	4CC10017		DB	'L','A',S,0,17H
2496	230F	D2141E		DB	'R',S,20,1EH
2497	2312	52C3140E		DB	'R','C',S,20,0EH
2498	2316	5243C100		DB	'RC','A',S,0,0FH
2498	231A	0F			
2499	231B	52C1001F		DB	'R','A',S,0,1FH
2500	231F	4CC4026F		DB	'L','D',S,2,6FH
2501	2323	52C40267		DB	'R','D',S,2,67H
2502	2327	4554C902		DB	'ET','I',S,2,4DH
2502	232B	4D			
2503	232C	4554CE02		DB	'ET','N',S,2,45H
2503	2330	45			
2504	2331	FF	AEND:	DB	OFFH
2505	2332	FF		DB	OFFH
2506				END	

AL	0002	ADL	0004	ASMB	1A1C	ADCTAB	20A9
ADDTAB	20B7	AEND	2331	BS	0008	BLANK	0020
BREAK	0A44	BEEP	02E5	BKPTADDR	12F1	BKPTCODE	12F3
BADNEWS	14D6	BYTESP	19F6	BYTE	19FB	BAD	1C66
BITH	2113	BIT2	211C	CR	000D	CHECK	0588
CURSOR	1171	CONTROL	0DDC	COMWIDTH	12CD	CURRENT	12DD
CUROBJ	12E3	CODE	12F4	COPY	15CE	COMTAB	16C3
CRLF	171B	CUE	17B9	CONVERT	191E	CVO	192F
CV1	1933	CV2	193F	CV3	1951	CLEAR	1979
CL	0001	CC	0009	CLASS	1E5E	CL1	1E66
CL3	1E6D	CL2	1E6E	CL4	1E7B	CL41	1E7D
CL5	1E98	CL6	1EA4	CLER	1EB2	CL7	1EB5
CL71	1EB7	CL72	1ECB	CALTAB	204D	CCODES	2184
COPS	2249	DOWN	13DB	DELAY	195E	DEL1	1961
DJH	1EDF	DJ1	1EF8	DJ2	1EFA	DWH	1EFE
DBH	1F04	DBH1	1F08	DBH3	1F12	DBH4	1F19
DSH	1F21	DL1	20C4	DL2	20C7	DL3	20CE
DL4	20DB	DL5	20E2	DOPS	226C	ENTRY	1200
EOFP	12E1	EXIT	1325	EO	1401	ER	1403
ENTER	1439	E3	14DA	EOF	16FA	ERR	1708
ERR2	170C	EXTERN	1757	E10	1919	E1	1A7E
E6	1CA4	E7	1DFA	E11	1E76	EQUH	1F51
EQ2	1F57	ENDH	1F5E	EOPS	22E0	FF	000C
FILESIZE	1102	FILESTART	1104	FILEXEC	1106	F1	0000
F2	0001	F3	0002	F5	0003	F6	0004
F7	0005	FLAGS	12C7	FEP	12E7	FILL	15DC
FIL2	15E7	FINDFILE	1820	FL2	1828	FL3	182B
FL4	1848	FL5	184A	FIELD	18FD	FD1	1C09
FD2	1C12	FD3	1C13	FD4	1C20	FD5	1C24
FD6	1C28	FD7	1C2E	FDB	1C36	FIND	1E0F
FIN1	1E15	FIN2	1E1C	GETCHAR	09B3	GOTO	1585
GOT2	158B	GOT3	1581	GETNAME	1804	GTN2	1808
GETOPTION	1A80	HBUFF	10F0	HOWBIG	1508	HOLD	1A95
IMAGE	130F	INSERT	1480	INPORT	16AB	IN2	16B4
INL	0003	IBC	0000	IDE	0002	IHL	0004
IAF	000E	ISP	0006	IB	0000	IC	0001
ID	0002	IE	0003	IH	0004	IL	0005
IA	0007	IIX	00DD	IY	00FD	IREF	0008
IINT	0000	ICY	001B	INCY	0010	IZ	0008
INZ	0000	IP0	0020	IPE	0028	IMIN	0038
IPBS	0030	IMH	207B	IM2	2084	IMTAB	208C
INCH	208F	INC2	209F	INTAB	213E	IO1	2152
IO2	2159	IOER	2160	IOPS	2286	JL	0003
JUMP	1AF9	JP2	1B02	JP3	1B33	JPTAB	1B3B
JRH	1ED1	JMPTAB	2038	JMP1	2042	JMP2	2046
JMP21	2049	JMP3	2051	KILL	13C4	KB2	1790
KEYBOARD	1793	KB3	17A7	KEYTB	21D8	LHEAD	0027
LDATA	002A	LCT	12D9	LIMIT	12DB	LBLP	12EB
LOCATE	138C	LC1	139A	LC2	13AA	LINE	13EA
LAST	141E	LINC	1A12	LL	0015	LIST	1B73
LS1	1B84	LS2	1B97	LS3	1BA6	LS4	1BA9
LS5	1BCA	LS6	1BD7	LS7	1BDB	LS8	1BDC
LS9	1BE5	LITLE	1C98	LITLE2	1C9C	LOADH	1F34
LTAB	1F60	L1	1FA0	L2	1FA4	L21	1FAB
L3	1FAE	L30	1FB5	L31	1FB8	L4	1FBB
L5	1FC1	L6	1FC6	L61	1FC7	L62	1FCA
L63	1FCD	L7	1FD0	LER	1FD5	L8	1FDB
L9	1FEA	LA	1FF1	LB	1FF9	LC	1FFE
LE	2007	LE1	2015	LOPS	222E	M1	1206
M2	120B	M3	1210	M4	1219	M5	121E

M6	1222	M7	1228	M8	1230	M12	1237
M20	1240	M14	1247	M13	124C	M15	1253
M16	125A	M17	1262	M18	126C	M21	1271
M22	1277	M23	127E	M24	1284	M25	128A
M27	1290	M28	1296	M29	129C	M30	12B4
MODIFY	15EF	MOD1	15F5	MOD2	15F8	MOD3	15FE
MOD4	161B	MOD5	1626	MEMCHECK	1989	MEMTOP	199D
MEN2	19A6	MEM3	19B4	MOFMIX	1CA9	MOFMX2	1CAA
MOFPRI	1CB5	MOFLH	1CB9	MOFH	1CBD	MOFB	1CC0
MOF	1CC1	MOF2	1CDE	MOF5	1CE8	MATH	1D70
MA2	1D76	MA3	1D7D	MA4	1D88	MA5	1D93
MA50	1D9A	MA51	1DA0	MA52	1DAB	MA6	1DB2
MA61	1DBB	MA62	1DC2	ML1	20EE	ML11	20F4
ML12	20F7	ML2	20FC	ML3	2105	NORMAL	0BCE
NEW	1452	NEXT	19B6	NX1	19BC	NYB	1A04
NO	0003	NOI	0007	OBJ	12EF	ONEPAIR	1694
OUTPUT	16A1	OUTPUT	1722	DWRITE	17EC	OL	0003
OPDSCH	1C42	OPTSCH	1C50	ORGH	1F40	OUTAB	2148
OPPS	22C0	PHEAD	0021	PDATA	0024	PAGENO	12D7
PC	12ED	PRINT	1410	PAIR	1695	PR2	1713
PR3	1715	PAGE	1856	PG2	1864	PARAMETER	18F4
PARAM1	18F7	POSITION	19C4	POS1	19CC	POS2	19DB
PASS	1A2E	PS1	1A31	PS2	1A6C	PARSER	1CEF
PA1	1CFC	PA2	1D0B	PA31	1D38	PA3	1D3C
PA7	1D40	PER	1D4D	PA4	1D50	PA5	1D56
PA6	1D6E	PFH	2063	PP2	2072	PP21	2075
QUERY	162E	QU2	1634	QU3	163D	QU4	1643
QU5	1650	QU7	1657	REENTRY	1203	READ	14DF
RESOURCE	14F0	REMOVE	18DB	RI	0004	RP	0001
RPI	0005	RE	0008	RESOLV	1C89	RSTH	2021
RST2	2029	RETH	202E	REGS	21A0	ROPS	22F3
SCREEN	0FB1	SPECIAL	0BB9	SYMWIDTH	12CF	SOFP	12DF
STB	12E9	SORT	151D	SRT2	1534	SCAN	153D
SCN1	1540	SCN2	1541	SCN3	154C	SCNS1	156B
SCN4	1570	SPACE	1720	STRING	17AD	STR1	17AF
STARTSTOP	1909	SOF	197E	SBL	0002	SYMBOL	1AA5
SY2	1AF6	SYMFIELD	1BF9	SYMSCH	1C3D	SEARCH	1C6E
SC2	1C74	SC3	1C79	SBCTAB	20B0	SRH	2125
SR2	2135	SOPS	22A3	TBUFF	11A3	TEMP	12E5
TOP	13CA	TARGET	13D7	THIS	142B	TRAP	188C
TRAP2	18D0	TL	0010	TR	0000	TCR	000B
TALPHA	0030	TLAB	0031	TOPD	0032	TCOM	0033
TINI	0034	TADD	0040	TSUB	00C0	TMUL	0080
TIIV	0081	TAND	0082	TOR	0083	TDEF	0035
TLIT	0036	TERM	1DC9	TE2	1DD1	TE3	1DDB
TYPL	1DFF	TYPTAB	1E2D	USTK	12F7	USP	1326
UPC	1329	UP	13B8	USER	17BC	US0	17C0
US1	17C6	US2	17D5	US4	17E7	UPDATE	1A0F
VERIFY	14CB	VIDEO	1728	VID2	1730	VID3	173B
VID4	173E	VID5	1741	VID6	1749	WRITE	149C
WORDBP	19F1	XAMINE	1667	XL	0004	XY	0002
XYI	0006	XYD	000A	XTAB	2163	X1	2170
XER	217C	X2	217E	X3	2181	ZEN	132B
ZFN2	1388	ZAP	13F3				

