

TEST

TEST 2 BRANCH
MD-11-DOB-A

EP-DOB-A-DL-A
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This microfiche card contains a grid of frames. The frames are arranged in approximately 10 rows and 5 columns. Each frame contains a small, dense grid of characters, likely representing a data table or a list of records. The characters are small and difficult to read, but they appear to be organized in a structured format. The card is otherwise blank.

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IDENTIFICATION

PRODUCT CODE: MAINDEC-11-DOAA TO DOLA-D
PRODUCT NAME: FIRST LEVEL 1-12
DATE CREATED: 17 MARCH 1970
MAINTAINER: DIAGNOSTIC GROUP
AUTHOR: JOHN HITTELL

THIS GROUP OF TESTS CONSIST OF:

PROCESSOR TEST	MAINDEC
TEST 1 BRANCH	11-DOAA
2 CON BRANCH	11-DOBA
3 UNARY	11-DOCA
4 UNARY AND BINARYS	11-DODA
5 ROTATE/SHIFT	11-DOEA
6 COMPARE	11-DOFA
7 COMPARE NOT	11-DOGA
8 MOVE	11-DOHA
9 BIS,BIC AND BIT	11-DOIA
10 ADD	11-DOJA
11 SUBTRACT	11-DOKA
12 JMP	11-DOLA

11-DOAA
11-DOBA
11-DOCA
11-DODA
11-DOEA
11-DOFA
11-DOGA
11-DOHA
11-DOIA
11-DOJA
11-DOKA
11-DOLA

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5. OPERATING PROCEDURE

5.1 OPERATIONAL SWITCH SETTINGS

5.1.1 NO SWITCHES ARE USED

5.1.3

5.2 SUBROUTINE ABSTRACTS

5.2.1 BEGIN SA 200

5.2.2 SCOPE

IS A "NOP" THAT IS PLACED BETWEEN EACH SUBTEST
IN THE INSTRUCTION SECTION. IF A SCOPE LOOP IS NEEDED,
INSERT A BRANCH TO THE PREVIOUS SCOPE LOCATION
AT THE CURRENT SCOPE LOCATION. (NOTE NOP=240)

5.2.3 HLT

INDICATES THE UNIQUE ADDRESS THAT TAGS THE
FAILING SUBTEST. THE INCORRECT DATA AT THE
TIME OF THE FAILURE MAY OR MAY NOT BE
DISPLAYED IN REGISTER ZERO, WHICH IS THE DATA
REGISTER ON A HALT.

5.3 PROGRAM AND/OR OPERATOR ACTION

5.3.1 LOADING AND STARTING AT 200 STARTS THE TEST. IF
AN ERROR IS DETECTED, THERE WILL BE A HALT.
WHEN A HALT OCCURS AND IT IS NECESSARY TO SCOPE ON
IT, PLACE INSERT A BRANCH INSTRUCTION IN THE
SCOPE LOCATION FOLLOWING THE HALT. THE BRANCH
INSTRUCTION SHOULD BRANCH YOU TO THE PREVIOUS
SCOPE LOCATION.

6. ERRORS

6.1 ALL ERRORS WILL CAUSE A HALT.

6.2 ERROR RECOVERY

ON TRAP ERRORS - RESTART AT 200.
DEPRESS CONTINUE TO CONTINUE TEST

7. RESTRICTIONS

7.1 STARTING RESTRICTION

NONE

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7.2 OPERATIONAL RESTRICTION
NONE

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8. MISCELLANEOUS

IF A HALT OCCURES IN THE TRAP OR INTERRUPT VECTOR AREA, REGISTER SIX SHOULD BE EXAMINED TO DETERMINE ITS CONTENTS, THEN USE REGISTER SIX CONTENTS AS AN ADDRESS TO DETERMINE THE LOCATION THE PROGRAM WAS AT, WHEN THE INTERRUPT OR TRAP OCCURRED. (MEMORY AS SPECIFIED BY R6 CONTAINS THE PC OF THE INSTRUCTION FOLLOWING THE INSTRUCTION WHERE THE TRAP OCCURED)

8.1 EXECUTION TIME

TIME BETWEEN BELLS

FOR TAPE 1	5	MINUTES
FOR TAPE 2	2.5	MINUTES
FOR TAPE 3	3	MINUTES
FOR TAPE 4	6	MINUTES
FOR TAPE 5	5	MINUTES
FOR TAPE 6	6	MINUTES
FOR TAPE 7	5	MINUTES
FOR TAPE 8	6	MINUTES
FOR TAPE 9	3	MINUTES
FOR TAPE 10	4	MINUTES
FOR TAPE 11	2	MINUTES
FOR TAPE 12	4	MINUTES

9. PROGRAM DESCRIPTION

- TEST 1 THIS IS A TEST OF THE UNCONDITIONAL BRANCH INSTRUCTION, IT PROVES THAT A LONG PROGRAM CAN BE LOADED AND THE INSTRUCTIONS CAN BE EXECUTED THROUGHOUT MEMORY.
- TEST 2 THIS IS A CONDITIONAL BRANCH TEST USING ALL OF THE CONDITIONAL BRANCH INSTRUCTIONS. IT TESTS THAT ALL COMBINATIONS OF CONDITION CODES ARE RESPONDED TO CORRECTLY. (THE CONDITION CODES ARE MANIPULATED WITH THE MICRO-PROGRAM OPERATIONS.)
- TEST 3 THIS IS A TEST OF THE UNARY INSTRUCTIONS AND THEIR EFFECTS UPON THE CONDITION CODES ONLY. MOSTLY REGISTER OPERATIONS.
- TEST 4 THIS IS A COMBINED USE OF UNARY AND BINARY INSTRUCTIONS TESTING THE RESULTS AND THE CONDITION CODES.
- TEST 5 THIS TEST ROTATE AND SHIFT INSTRUCTION, BOTH THE REGISTERS AND MEMORY LOCATIONS, WORD AND BYTE, ARE TESTED.
- TEST 6 THIS IS A TEST OF THE COMPARE INSTRUCTIONS FOR

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EQUALITY. ALL CONDITIONAL BRANCHES THAT WILL
BRANCH ON ANY FORM OF EQUALITY ARE ALSO TESTED.
BOTH WORD AND BYTE OPERATIONS ARE USED.

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TEST 7 COMPARE NOT. THIS IS A TEST OF THE COMPARE INSTRUCTIONS WHERE NO VALUES ARE EQUAL. HERE BRANCHES FOR NOT EQUAL, GREATER THAN AND LESS THAN, ETC., ARE TESTED.

TEST 8 CHECKS THE MOVE INSTRUCTION BOTH TO MEMORY AND REGISTERS.

TEST 9 CHECK THE BIS, BIC AND BIT INSTRUCTION BOTH TO MEMORY AND TO REGISTERS.

TEST 10 TESTS THE ADD INSTRUCTION.

TEST 11 TESTS THE SUBTRACT INSTRUCTION.

TEST 12 TEST OF THE JUMP INSTRUCTION IN MOST MODES.

NOTE THAT STACK OPERATION AND INSTRUCTIONS THAT USE THEM ARE NOT TESTED IN THIS GROUP OF TEST.

- 10. LISTING
- 11. FLOW CHART(S)

252			%	
253			;TEST 2--PDP11 CONDITIONAL BRANCH, SIGN ARITHMETIC AND NON SIGN ARITHMETIC	
254		000000	.=0	
255	000000	000002	.+2	
256	000002	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
257	000004	000006	.+2	
258	000006	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
259	000010	000012	.+2	
260	000012	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
261	000014	000016	.+2	
262	000016	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
263	000020	000022	.+2	
264	000022	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
265	000024	000026	.+2	
266	000026	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
267	000030	000032	.+2	
268	000032	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
269	000034	000036	.+2	
270	000036	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
271	000040	000042	.+2	
272	000042	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
273	000044	000046	.+2	
274	000046	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
275	000050	000052	.+2	
276	000052	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
277	000054	000056	.+2	
278	000056	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
279	000060	000062	.+2	
280	000062	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
281	000064	000066	.+2	
282	000066	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
283	000070	000072	.+2	
284	000072	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
285	000074	000076	.+2	
286	000076	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
287	000100	000102	.+2	
288	000102	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
289	000104	000106	.+2	
290	000106	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
291	000110	000112	.+2	
292	000112	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
293	000114	000116	.+2	
294	000116	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
295	000120	000122	.+2	
296	000122	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
297	000124	000126	.+2	
298	000126	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
299	000130	000132	.+2	
300	000132	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
301	000134	000136	.+2	
302	000136	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
303	000140	000142	.+2	
304	000142	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
305	000144	000146	.+2	
306	000146	000000	HALT	;TRAPPED TO PREVIOUS ADDRESS
307	000150	000152	.+2	

308	000152	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
309	000154	000156	.+2	
310	000156	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
311	000160	000162	.+2	
312	000162	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
313	000164	000166	.+2	
314	000166	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
315	000170	000172	.+2	
316	000172	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
317	000174	000176	.+2	
318	000176	000000	HALT	; TRAPPED TO PREVIOUS ADDRESS
319		000240	NOP=000240	
320		000000	HLT=0	
321		000240	SCOPE=NOP	
322		177570	SR=177570	
323		000200	. =200	; START OF PROGRAM
324				

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325					
326					
327	000200	000257			;N=0, Z=0, V=0, C=0
328			CCC		;CLEAR CONDITION CODES
329	000202	103401	BCS	.+4	
330	000204	000401	BR	.+4	
331	000206	000000	HLT		;C WAS NOT CLEAR
332	000210	000240	SCOPE		
333					
334	000212	103001	BCC	.+4	
335	000214	000000	HLT		;C SHOULD NOT HAVE BRANCHED
336	000216	000240	SCOPE		
337					
338	000220	102401	BVS	.+4	
339	000222	000401	BR	.+4	
340	000224	000000	HLT		;V WAS NOT CLEAR
341	000226	000240	SCOPE		
342					
343	000230	102001	BVC	.+4	
344	000232	000000	HLT		;V SHOULD NOT HAVE BRANCHED
345	000234	000240	SCOPE		
346					
347	000236	001401	BEG	.+4	
348	000240	000401	BR	.+4	
349	000242	000000	HLT		;Z WAS NOT CLEAR
350	000244	000240	SCOPE		
351					
352	000246	001001	BNE	.+4	
353	000250	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
354	000252	000240	SCOPE		
355					
356	000254	100401	BMI	.+4	
357	000256	000401	BR	.+4	
358	000260	000000	HLT		;N WAS NOT CLEAR
359	000262	000240	SCOPE		
360					
361	000264	100001	BPL	.+4	
362	000266	000000	HLT		;N SHOULD NOT HAVE BRANCHED
363	000270	000240	SCOPE		
364					
365					
366	000272	000261			;N=0, Z=0, V=0, C=1
367			SEC		;SET "C"
368	000274	103401	BCS	.+4	
369	000276	000000	HLT		;C WAS NOT SET
370	000300	000240	SCOPE		
371					
372	000302	103001	BCC	.+4	
373	000304	000401	BR	.+4	
374	000306	000000	HLT		;C SHOULD NOT HAVE BRANCHED
375	000310	000240	SCOPE		
376					
377					
378	000312	102401	BVS	.+4	
379	000314	000401	BR	.+4	
380	000316	000000	HLT		;V WAS NOT CLEAR

381	000320	000240	SCOPE		
382					
383	000322	102001	BVC	.+4	
384	000324	000000	HLT		;V SHOULD NOT HAVE BRANCHED
385	000326	000240	SCOPE		
386					
387	000330	001401	BEQ	.+4	
388	000332	000401	BR	.+4	
389	000334	000000	HLT		;Z WAS NOT CLEAR
390	000336	000240	SCOPE		
391					
392	000340	001001	BNE	.+4	
393	000342	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
394	000344	000240	SCOPE		
395					
396	000346	100401	BMI	.+4	
397	000350	000401	BR	.+4	
398	000352	000000	HLT		;N WAS NOT CLEAR
399	000354	000240	SCOPE		
400					
401	000356	100001	BPL	.+4	
402	000360	000000	HLT		;N SHOULD NOT HAVE BRANCHED
403	000362	000240	SCOPE		
404					
405					;N=0, Z=0, V=1, C=0
406	000364	000241	CLC		;CLEAR "C"
407	000366	000262	SEV		;SET "V"
408					
409	000370	103401	BCS	.+4	
410	000372	000401	BR	.+4	
411	000374	000000	HLT		;C WAS NOT CLEAR
412	000376	000240	SCOPE		
413					
414	000400	103001	BCC	.+4	
415	000402	000000	HLT		;C SHOULD NOT HAVE BRANCHED
416	000404	000240	SCOPE		
417					
418	000406	102401	BVS	.+4	
419	000410	000000	HLT		;V WAS NOT SET
420	000412	000240	SCOPE		
421					
422	000414	102001	BVC	.+4	
423	000416	000401	BR	.+4	
424	000420	000000	HLT		;V SHOULD NOT HAVE BRANCHED
425	000422	000240	SCOPE		
426					
427					
428	000424	001401	BEQ	.+4	
429	000426	000401	BR	.+4	
430	000430	000000	HLT		;Z WAS NOT CLEAR
431	000432	000240	SCOPE		
432					
433	000434	001001	BNE	.+4	
434	000436	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
435	000440	000240	SCOPE		
436					

437	000442	100401	BMI	.+4	
438	000444	000401	BR	.+4	
439	000446	000000	HLT		;N WAS NOT CLEAR
440	000450	000240	SCOPE		
441					
442	000452	100001	BPL	.+4	
443	000454	000000	HLT		;N SHOULD NOT HAVE BRANCHED
444	000456	000240	SCOPE		
445					
446					;N=0, Z=0, V=1, C=1
447	000460	000263	+SEV!SEC		;SET "V" AND "C"
448					
449	000462	103401	BCS	.+4	
450	000464	000000	HLT		;C WAS NOT SET
451	000466	000240	SCOPE		
452					
453	000470	103001	BCC	.+4	
454	000472	000401	BR	.+4	
455	000474	000000	HLT		;C SHOULD NOT HAVE BRANCHED
456	000476	000240	SCOPE		
457					
458					
459	000500	102401	BVS	.+4	
460	000502	000000	HLT		;V WAS NOT SET
461	000504	000240	SCOPE		
462					
463	000506	102001	BVC	.+4	
464	000510	000401	BR	.+4	
465	000512	000000	HLT		;V SHOULD NOT HAVE BRANCHED
466	000514	000240	SCOPE		
467					
468					
469	000516	001401	BEG	.+4	
470	000520	000401	BR	.+4	
471	000522	000000	HLT		;Z WAS NOT CLEAR
472	000524	000240	SCOPE		
473					
474	000526	001001	BNE	.+4	
475	000530	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
476	000532	000240	SCOPE		
477					
478	000534	100401	BMI	.+4	
479	000536	000401	BR	.+4	
480	000540	000000	HLT		;N WAS NOT CLEAR
481	000542	000240	SCOPE		
482					
483	000544	100001	BPL	.+4	
484	000546	000000	HLT		;N SHOULD NOT HAVE BRANCHED
485	000550	000240	SCOPE		
486					
487					;N=0, Z=1, V=0, C=0
488	000552	000257	CCC		;CLEAR CONDITION CODES
489	000554	000264	SEZ		;SET Z
490					
491	000556	103401	BCS	.+4	
492	000560	000401	BR	.+4	

493	000562	000000	HLT		;C WAS NOT CLEAR
494	000564	000240	SCOPE		
495					
496	000566	103001	BCC	.+4	
497	000570	000000	HLT		;C SHOULD NOT HAVE BRANCHED
498	000572	000240	SCOPE		
499					
500	000574	102401	BVS	.+4	
501	000576	000401	BR	.+4	
502	000600	000000	HLT		;V WAS NOT CLEAR
503	000602	000240	SCOPE		
504					
505	000604	102001	BVC	.+4	
506	000606	000000	HLT		;V SHOULD NOT HAVE BRANCHED
507	000610	000240	SCOPE		
508					
509	000612	001401	BEQ	.+4	
510	000614	000000	HLT		;Z WAS NOT SET
511	000616	000240	SCOPE		
512					
513	000620	001001	BNE	.+4	
514	000622	000401	BR	.+4	
515	000624	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
516	000626	000240	SCOPE		
517					
518					
519	000630	100401	BMI	.+4	
520	000632	000401	BR	.+4	
521	000634	000000	HLT		;N WAS NOT CLEAR
522	000636	000240	SCOPE		
523					
524	000640	100001	BPL	.+4	
525	000642	000000	HLT		;N SHOULD NOT HAVE BRANCHED
526	000644	000240	SCOPE		
527					
528					
529	000646	000257	CCC		;CLEAR
530	000650	000265	+SEC!SEZ		;SET "C" AND Z
531					
532	000652	103401	BCS	.+4	
533	000654	000000	HLT		;C WAS NOT SET
534	000656	000240	SCOPE		
535					
536	000660	103001	BCC	.+4	
537	000662	000401	BR	.+4	
538	000664	000000	HLT		;C SHOULD NOT HAVE BRANCHED
539	000666	000240	SCOPE		
540					
541					
542	000670	102401	BVS	.+4	
543	000672	000401	BR	.+4	
544	000674	000000	HLT		;V WAS NOT CLEAR
545	000676	000240	SCOPE		
546					
547	000700	102001	BVC	.+4	
548	000702	000000	HLT		;V SHOULD NOT HAVE BRANCHED

;N=0, Z=1, V=0, C=1

570	000704	000240	SCOPE		
571	000706	001401	BEQ	.+4	
572	000710	000000	HLT		;Z WAS NOT SET
573	000712	000240	SCOPE		
574	000714	001001	BNE	.+4	
575	000716	000401	BR	.+4	
576	000720	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
577	000722	000240	SCOPE		
578	000724	100401	BMI	.+4	
579	000726	000401	BR	.+4	
580	000730	000000	HLT		;N WAS NOT CLEAR
581	000732	000240	SCOPE		
582	000734	100001	BPL	.+4	
583	000736	000000	HLT		;N SHOULD NOT HAVE BRANCHED
584	000740	000240	SCOPE		
585			;N=0, Z=1, V=1, C=0		
586	000742	000257	CCC		;CLEAR CODES
587	000744	000266	+SEZ!SEV		;SET Z AND V
588	000746	103401	BCS	.+4	
589	000750	000401	BR	.+4	
590	000752	000000	HLT		;C WAS NOT CLEAR
591	000754	000240	SCOPE		
592	000756	103001	BCC	.+4	
593	000760	000000	HLT		;C SHOULD NOT HAVE BRANCHED
594	000762	000240	SCOPE		
595	000764	102401	BVS	.+4	
596	000766	000000	HLT		;V WAS NOT SET
597	000770	000240	SCOPE		
598	000772	102001	BVC	.+4	
599	000774	000401	BR	.+4	
600	000776	000000	HLT		;V SHOULD NOT HAVE BRANCHED
601	001000	000240	SCOPE		
602	001002	001401	BEQ	.+4	
603	001004	000000	HLT		;Z WAS NOT SET
604	001006	000240	SCOPE		
605	001010	001001	BNE	.+4	
606	001012	000401	BR	.+4	
607	001014	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
608	001016	000240	SCOPE		

602					
603	001020	100401	BMI	.+4	
604	001022	000401	BR	.+4	
605	001024	000000	HLT		;N WAS NOT CLEAR
606	001026	000240	SCOPE		
607					
608	001030	100001	BPL	.+4	
609	001032	000000	HLT		;N SHOULD NOT HAVE BRANCHED
610	001034	000240	SCOPE		
611					
612	001036	000257	CCC		;CLEAR CODES
613	001040	000267	+SEZ!SEV!SEC		;SET Z, V AND C
614					
615	001042	103401	BCS	.+4	
616	001044	000000	HLT		;C WAS NOT SET
617	001046	000240	SCOPE		
618					
619	001050	103001	BCC	.+4	
620	001052	000401	BR	.+4	
621	001054	000000	HLT		;C SHOULD NOT HAVE BRANCHED
622	001056	000240	SCOPE		
623					
624					
625	001060	102401	BVS	.+4	
626	001062	000000	HLT		;V WAS NOT SET
627	001064	000240	SCOPE		
628					
629	001066	102001	BVC	.+4	
630	001070	000401	BR	.+4	
631	001072	000000	HLT		;V SHOULD NOT HAVE BRANCHED
632	001074	000240	SCOPE		
633					
634					
635	001076	001401	BEQ	.+4	
636	001100	000000	HLT		;Z WAS NOT SET
637	001102	000240	SCOPE		
638					
639	001104	001001	BNE	.+4	
640	001106	000401	BR	.+4	
641	001110	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
642	001112	000240	SCOPE		
643					
644					
645	001114	100401	BMI	.+4	
646	001116	000401	BR	.+4	
647	001120	000000	HLT		;N WAS NOT CLEAR
648	001122	000240	SCOPE		
649					
650	001124	100001	BPL	.+4	
651	001126	000000	HLT		;N SHOULD NOT HAVE BRANCHED
652	001130	000240	SCOPE		
653					
654					
655	001132	000257	CCC		;CLEAR CODES
656	001134	000270	SEN		;SET N
657					

;N=0, Z=1, V=1, C=1

;N=1, Z=0, V=0, C=0

658	001136	103401	BUS	.+4	
659	001140	000401	BR	.+4	
660	001142	000000	HLT		;C WAS NOT CLEAR
661	001144	000240	SCOPE		
662					
663	001146	103001	BCC	.+4	
664	001150	000000	HLT		;C SHOULD NOT HAVE BRANCHED
665	001152	000240	SCOPE		
666					
667	001154	102401	BVS	.+4	
668	001156	000401	BR	.+4	
669	001160	000000	HLT		;V WAS NOT CLEAR
670	001162	000240	SCOPE		
671					
672	001164	102001	BVC	.+4	
673	001166	000000	HLT		;V SHOULD NOT HAVE BRANCHED
674	001170	000240	SCOPE		
675					
676	001172	001401	BEQ	.+4	
677	001174	000401	BR	.+4	
678	001176	000000	HLT		;Z WAS NOT CLEAR
679	001200	000240	SCOPE		
680					
681	001202	001001	BNE	.+4	
682	001204	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
683	001206	000240	SCOPE		
684					
685	001210	100401	BMI	.+4	
686	001212	000000	HLT		;N WAS NOT SET
687	001214	000240	SCOPE		
688					
689	001216	100001	BPL	.+4	
690	001220	000401	BR	.+4	
691	001222	000000	HLT		;N SHOULD NOT HAVE BRANCHED
692	001224	000240	SCOPE		
693					
694					
695					;N=1, Z=0, V=0, C=1
696	001226	000257	CCC		
697	001230	000271	+SEN!SEC		
698					
699	001232	103401	BCS	.+4	
700	001234	000000	HLT		;C WAS NOT SET
701	001236	000240	SCOPE		
702					
703	001240	103001	BCC	.+4	
704	001242	000401	BR	.+4	
705	001244	000000	HLT		;C SHOULD NOT HAVE BRANCHED
706	001246	000240	SCOPE		
707					
708					
709	001250	102401	BVS	.+4	
710	001252	000401	BR	.+4	
711	001254	000000	HLT		;V WAS NOT CLEAR
712	001256	000240	SCOPE		
713					

714	001260	102001	BVC	.+4	
715	001262	000000	HLT		;V SHOULD NOT HAVE BRANCHED
716	001264	000240	SCOPE		
717					
718	001266	001401	BEQ	.+4	
719	001270	000401	BR	.+4	
720	001272	000000	HLT		;Z WAS NOT CLEAR
721	001274	000240	SCOPE		
722					
723	001276	001001	BNE	.+4	
724	001300	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
725	001302	000240	SCOPE		
726					
727	001304	100401	BMI	.+4	
728	001306	000000	HLT		;N WAS NOT SET
729	001310	000240	SCOPE		
730					
731	001312	100001	BPL	.+4	
732	001314	000401	BR	.+4	
733	001316	000000	HLT		;N SHOULD NOT HAVE BRANCHED
734	001320	000240	SCOPE		
735					
736					
737					;N=1, Z=0, V=1, C=0
738	001322	000257	CCC		
739	001324	000272	+SEV!SEN		
740					
741	001326	103401	BCS	.+4	
742	001330	000401	BR	.+4	
743	001332	000000	HLT		;C WAS NOT CLEAR
744	001334	000240	SCOPE		
745					
746	001336	103001	BCC	.+4	
747	001340	000000	HLT		;C SHOULD NOT HAVE BRANCHED
748	001342	000240	SCOPE		
749					
750	001344	102401	BVS	.+4	
751	001346	000000	HLT		;V WAS NOT SET
752	001350	000240	SCOPE		
753					
754	001352	102001	BVC	.+4	
755	001354	000401	BR	.+4	
756	001356	000000	HLT		;V SHOULD NOT HAVE BRANCHED
757	001360	000240	SCOPE		
758					
759					
760	001362	001401	BEQ	.+4	
761	001364	000401	BR	.+4	
762	001366	000000	HLT		;Z WAS NOT CLEAR
763	001370	000240	SCOPE		
764					
765	001372	001001	BNE	.+4	
766	001374	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
767	001376	000240	SCOPE		
768					
769	001400	100401	BMI	.+4	

770	001402	000000	HLT		;N WAS NOT SET
771	001404	000240	SCOPE		
772					
773	001406	100001	BPL	.+4	
774	001410	000401	BR	.+4	
775	001412	000000	HLT		;N SHOULD NOT HAVE BRANCHED
776	001414	000240	SCOPE		
777					
778					
779					
780	001416	000277	SCC		;SET CODES
781	001420	000244	CLZ		;CLEAR Z
782					
783	001422	103401	BCS	.+4	
784	001424	000000	HLT		;C WAS NOT SET
785	001426	000240	SCOPE		
786					
787	001430	103001	BCC	.+4	
788	001432	000401	BR	.+4	
789	001434	000000	HLT		;C SHOULD NOT HAVE BRANCHED
790	001436	000240	SCOPE		
791					
792					
793	001440	102401	BVS	.+4	
794	001442	000000	HLT		;V WAS NOT SET
795	001444	000240	SCOPE		
796					
797	001446	102001	BVC	.+4	
798	001450	000401	BR	.+4	
799	001452	000000	HLT		;V SHOULD NOT HAVE BRANCHED
800	001454	000240	SCOPE		
801					
802					
803	001456	001401	BEG	.+4	
804	001460	000401	BR	.+4	
805	001462	000000	HLT		;Z WAS NOT CLEAR
806	001464	000240	SCOPE		
807					
808	001466	001001	BNE	.+4	
809	001470	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
810	001472	000240	SCOPE		
811					
812	001474	100401	BMI	.+4	
813	001476	000000	HLT		;N WAS NOT SET
814	001500	000240	SCOPE		
815					
816	001502	100001	BPL	.+4	
817	001504	000401	BR	.+4	
818	001506	000000	HLT		;N SHOULD NOT HAVE BRANCHED
819	001510	000240	SCOPE		
820					
821					
822					
823	001512	000277	SCC		;SET CODES
824	001514	000243	+CLV!CLC		;CLEAR V AND C
825					

826	001516	103401	BCS	.+4	
827	001520	000401	BR	.+4	
828	001522	000000	HLT		;C WAS NOT CLEAR
829	001524	000240	SCOPE		
830					
831	001526	103001	BCC	.+4	
832	001530	000000	HLT		;C SHOULD NOT HAVE BRANCHED
833	001532	000240	SCOPE		
834					
835	001534	102401	BVS	.+4	
836	001536	000401	BR	.+4	
837	001540	000000	HLT		;V WAS NOT CLEAR
838	001542	000240	SCOPE		
839					
840	001544	102001	BVC	.+4	
841	001546	000000	HLT		;V SHOULD NOT HAVE BRANCHED
842	001550	000240	SCOPE		
843					
844	001552	001401	BEG	.+4	
845	001554	000000	HLT		;Z WAS NOT SET
846	001556	000240	SCOPE		
847					
848	001560	001001	BNE	.+4	
849	001562	000401	BR	.+4	
850	001564	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
851	001566	000240	SCOPE		
852					
853					
854	001570	100401	BMI	.+4	
855	001572	000000	HLT		;N WAS NOT SET
856	001574	000240	SCOPE		
857					
858	001576	100001	BPL	.+4	
859	001600	000401	BR	.+4	
860	001602	000000	HLT		;N SHOULD NOT HAVE BRANCHED
861	001604	000240	SCOPE		
862					

```

863                                     ;N=1, Z=1, V=0, C=1
864 001606 000277                       SCC           ;SET CODES
865 001610 000242                       CLV           ;CLEAR V
866
867 001612 103401                       BCS           .+4
868 001614 000000                       HLT
869 00161E 000240                       SCOPE
870
871 001620 103001                       BCC           .+4
872 001622 000401                       BR            .+4
873 001624 000000                       HLT
874 001626 000240                       SCOPE
875
876
877 001630 102401                       BVS           .+4
878 001632 000401                       BR            .+4
879 001634 000000                       HLT
880 001636 000240                       SCOPE
881
882 001640 102001                       BVC           .+4
883 001642 000000                       HLT
884 001644 000240                       SCOPE
885
886 001646 001401                       BEQ           .+4
887 001650 000000                       HLT
888 001652 000240                       SCOPE
889
890 001654 001001                       BNE           .+4
891 001656 000401                       BR            .+4
892 001660 000000                       HLT
893 001662 000240                       SCOPE
894
895
896 001664 100401                       BMI           .+4
897 001666 000000                       HLT
898 001670 000240                       SCOPE
899
900 001672 100001                       BPL           .+4
901 001674 000401                       BR            .+4
902 001676 000000                       HLT
903 001700 000240                       SCOPE
904
905
906                                     ;N=1, Z=1, V=1, C=0
907 001702 000277                       SCC           ;SET CODES
908 001704 000241                       CLC           ;CLEAR "C"
909
910 001706 103401                       BCS           .+4
911 001710 000401                       BR            .+4
912 001712 000000                       HLT
913 001714 000240                       SCOPE
914
915 001716 103001                       BCC           .+4
916 001720 000000                       HLT
917 001722 000240                       SCOPE
918

```

```

;C WAS NOT SET
;C SHOULD NOT HAVE BRANCHED
;V WAS NOT CLEAR
;V SHOULD NOT HAVE BRANCHED
;Z WAS NOT SET
;Z SHOULD NOT HAVE BRANCHED
;N WAS NOT SET
;N SHOULD NOT HAVE BRANCHED
;C WAS NOT CLEAR
;C SHOULD NOT HAVE BRANCHED

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919	001724	:02401	BVS	.+4	
920	001726	000000	HLT		;V WAS NOT SET
921	001730	000240	SCOPE		
922					
923	001732	102001	BVC	.+4	
924	001734	000401	BR	.+4	
925	001736	000000	HLT		;V SHOULD NOT HAVE BRANCHED
926	001740	000240	SCOPE		
927					
928					
929	001742	001401	BEG	.+4	
930	001744	000000	HLT		;Z WAS NOT SET
931	001746	000240	SCOPE		
932					
933	001750	001001	BNE	.+4	
934	001752	000401	BR	.+4	
935	001754	000000	HLT		;Z SHOULD NOT HAVE BRANCHED
936	001756	000240	SCOPE		
937					
938					
939	001760	100401	BMI	.+4	
940	001762	000000	HLT		;N WAS NOT SET
941	001764	000240	SCOPE		
942					
943	001766	100001	BPL	.+4	
944	001770	000401	BR	.+4	
945	001772	000000	HLT		;N SHOULD NOT HAVE BRANCHED
946	001774	000240	SCOPE		
947					
948					
949					;N=1, Z=1, V=1, C=1
950	001776	000277	SCC		
951					
952	002000	103401	BCS	.+4	
953	002002	000000	HLT		;C WAS NOT SET
954	002004	000240	SCOPE		
955					
956	002006	103001	BCC	.+4	
957	002010	000401	BR	.+4	
958	002012	000000	HLT		;C SHOULD NOT HAVE BRANCHED
959	002014	000240	SCOPE		
960					
961					
962	002016	102401	BVS	.+4	
963	002020	000000	HLT		;V WAS NOT SET
964	002022	000240	SCOPE		
965					
966	002024	102001	BVC	.+4	
967	002026	000401	BR	.+4	
968	002030	000000	HLT		;V SHOULD NOT HAVE BRANCHED
969	002032	000240	SCOPE		
970					
971					
972	002034	001401	BEG	.+4	
973	002036	000000	HLT		;Z WAS NOT SET
974	002040	000240	SCOPE		

975
976 002042 001001
977 002044 000401
978 002046 000000
979 002050 000240
980
981 002052

BNE .+4
BR .+4
HLT
SCOPE

;Z SHOULD NOT HAVE BRANCHED

NEXT:

982
983 002052 100401
984 002054 000000
985 002056 000240
986
987 002060 100001
988 002062 000401
989 002064 000000
990 002066 000240
991

BMI .+4
HLT
SCOPE

;N WAS NOT SET

BPL .+4
BR .+4
HLT
SCOPE

;N SHOULD NOT HAVE BRANCHED

992
993
994
995
996

:FOR CASE 0 AND 12
:FOR CASE 1 AND 13
:FOR CASE 2 AND 10
:FOR CASE 3 AND 11
:FOR CASE 4

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997
998
999
1000

:FOR CASE 6 AND 14
:FOR CASE 7 AND 15
:FOR CASE 16
:CASE 17

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1001
1002           ;START OF TEST
1003 002070 000240           SCOPE
1004 002072 000257           CCC           ;0
1005
1006 002074 001001           BNE      .+4           ;BNE SHOULD BRANCH
1007 002076 000000           HLT
1008 002100 000240           SCOPE           ;BNE BRANCH FAILED
1009
1010 002102 001401           BEQ      .+4           ;BEQ SHOULD NOT BRANCH
1011 002104 000401           BR       .+4
1012 002106 000000           HLT
1013 002110 000240           SCOPE           ;BEQ BRANCH FAILED
1014
1015
1016 002112 002001           BGE      .+4           ;BGE SHOULD BRANCH
1017 002114 000000           HLT
1018 002116 000240           SCOPE           ;BGE BRANCH FAILED
1019
1020 002120 002401           BLT      .+4           ;BLT SHOULD NOT BRANCH
1021 002122 000401           BR       .+4
1022 002124 000000           HLT
1023 002126 000240           SCOPE           ;BLT BRANCH FAILED
1024
1025
1026 002130 003001           BGT      .+4           ;BGT SHOULD BRANCH
1027 002132 000000           HLT
1028 002134 000240           SCOPE           ;BGT BRANCH FAILED
1029
1030 002136 003401           BLE      .+4           ;BLE SHOULD NOT BRANCH
1031 002140 000401           BR       .+4
1032 002142 000000           HLT
1033 002144 000240           SCOPE           ;BLE BRANCH FAILED
1034
1035
1036 002146 103001           BHIS     .+4           ;BHIS SHOULD BRANCH
1037 002150 000000           HLT
1038 002152 000240           SCOPE           ;BHIS BRANCH FAILED
1039
1040 002154 103401           BLO      .+4           ;BLO SHOULD NOT BRANCH
1041 002156 000401           BR       .+4
1042 002160 000000           HLT
1043 002162 000240           SCOPE           ;BLO BRANCH FAILED
1044
1045
1046 002164 101001           BHI      .+4           ;BHI SHOULD BRANCH
1047 002166 000000           HLT
1048 002170 000240           SCOPE           ;BHI BRANCH FAILED
1049
1050 002172 101401           BLOS     .+4           ;BLOS SHOULD NOT BRANCH
1051 002174 000401           BR       .+4
1052 002176 000000           HLT
1053 002200 000240           SCOPE           ;BLOS BRANCH FAILED
1054
1055 002202 000257           CCC
1056 002204 000261           SEC
  
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1057					
1058	002206	001001	BNE	.+4	:BNE SHOULD BRANCH
1059	002210	000000	HLT		:BNE BRANCH FAILED
1060	002212	000240	SCOPE		
1061					
1062	002214	001401	BEG	.+4	:BEG SHOULD NOT BRANCH
1063	002216	000401	BR	.+4	
1064	002220	000000	HLT		:BEG BRANCH FAILED
1065	002222	000240	SCOPE		
1066					
1067					
1068	002224	002001	BGE	.+4	:BGE SHOULD BRANCH
1069	002226	000000	HLT		:BGE BRANCH FAILED
1070	002230	000240	SCOPE		
1071					
1072	002232	002401	BLT	.+4	:BLT SHOULD NOT BRANCH
1073	002234	000401	BR	.+4	
1074	002236	000000	HLT		:BLT BRANCH FAILED
1075	002240	000240	SCOPE		
1076					
1077					
1078	002242	003001	BGT	.+4	:BGT SHOULD BRANCH
1079	002244	000000	HLT		:BGT BRANCH FAILED
1080	002246	000240	SCOPE		
1081					
1082	002250	003401	BLE	.+4	:BLE SHOULD NOT BRANCH
1083	002252	000401	BR	.+4	
1084	002254	000000	HLT		:BLE BRANCH FAILED
1085	002256	000240	SCOPE		
1086					
1087					
1088	002260	103401	BLO	.+4	:BLO SHOULD BRANCH
1089	002262	000000	HLT		:BLO BRANCH FAILED
1090	002264	000240	SCOPE		
1091					
1092	002266	103001	BHIS	.+4	:BHIS SHOULD NOT BRANCH
1093	002270	000401	BR	.+4	
1094	002272	000000	HLT		:BHIS BRANCH FAILED
1095	002274	000240	SCOPE		
1096					
1097					
1098	002276	101401	BLOS	.+4	:BLOS SHOULD BRANCH
1099	002300	000000	HLT		:BLOS BRANCH FAILED
1100	002302	000240	SCOPE		
1101					
1102	002304	101001	BHI	.+4	:BHI SHOULD NOT BRANCH
1103	002306	000401	BR	.+4	
1104	002310	000000	HLT		:BHI BRANCH FAILED
1105	002312	000240	SCOPE		
1106					
1107	002314	000257	CCC		
1108	002316	000262	SEV		:2
1109					
1110	002320	001001	BNE	.+4	:BNE SHOULD BRANCH
1111	002322	000000	HLT		:BNE BRANCH FAILED
1112	002324	000240	SCOPE		

1113					
1114	002326	001401	BEG	.+4	;BEG SHOULD NOT BRANCH
1115	002330	000401	BR	.+4	
1116	002332	000000	HLT		;BEG BRANCH FAILED
1117	002334	000240	SCOPE		
1118					
1119					
1120	002336	002401	BLT	.+4	;BLT SHOULD BRANCH
1121	002340	000000	HLT		;BLT BRANCH FAILED
1122	002342	000240	SCOPE		
1123					
1124	002344	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1125	002346	000401	BR	.+4	
1126	002350	000000	HLT		;BGE BRANCH FAILED
1127	002352	000240	SCOPE		
1128					
1129					
1130	002354	003401	BLE	.+4	;BLE SHOULD BRANCH
1131	002356	000000	HLT		;BLE BRANCH FAILED
1132	002360	000240	SCOPE		
1133					
1134	002362	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1135	002364	000401	BR	.+4	
1136	002366	000000	HLT		;BGT BRANCH FAILED
1137	002370	000240	SCOPE		
1138					
1139					
1140	002372	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1141	002374	000000	HLT		;BHIS BRANCH FAILED
1142	002376	000240	SCOPE		
1143					
1144	002400	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1145	002402	000401	BR	.+4	
1146	002404	000000	HLT		;BLO BRANCH FAILED
1147	002406	000240	SCOPE		
1148					
1149					
1150	002410	101001	BHI	.+4	;BHI SHOULD BRANCH
1151	002412	000000	HLT		;BHI BRANCH FAILED
1152	002414	000240	SCOPE		
1153					
1154	002416	101401	BLOS	.+4	;BLOS SHOULD NOT BRANCH
1155	002420	000401	BR	.+4	
1156	002422	000000	HLT		;BLOS BRANCH FAILED
1157	002424	000240	SCOPE		
1158					
1159	002426	000257	CCC		
1160	002430	000263	+SEV!SEC		;3
1161					
1162	002432	001001	BNE	.+4	;BNE SHOULD BRANCH
1163	002434	000000	HLT		;BNE BRANCH FAILED
1164	002436	000240	SCOPE		
1165					
1166	002440	001401	BEG	.+4	;BEG SHOULD NOT BRANCH
1167	002442	000401	BR	.+4	
1168	002444	000000	HLT		;BEG BRANCH FAILED

1169	002446	000240	SCOPE		
1170					
1171					
1172	002450	002401	BLT	.+4	;BLT SHOULD BRANCH
1173	002452	000000	HLT		;BLT BRANCH FAILED
1174	002454	000240	SCOPE		
1175					
1176	002456	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1177	002460	000401	BR	.+4	
1178	002462	000000	HLT		;BGE BRANCH FAILED
1179	002464	000240	SCOPE		
1180					
1181					
1182	002466	003401	BLE	.+4	;BLE SHOULD BRANCH
1183	002470	000000	HLT		;BLE BRANCH FAILED
1184	002472	000240	SCOPE		
1185					
1186	002474	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1187	002476	000401	BR	.+4	
1188	002500	000000	HLT		;BGT BRANCH FAILED
1189	002502	000240	SCOPE		
1190					
1191					
1192	002504	103401	BLO	.+4	;BLO SHOULD BRANCH
1193	002506	000000	HLT		;BLO BRANCH FAILED
1194	002510	000240	SCOPE		
1195					
1196	002512	103001	BHIS	.+4	;BHIS SHOULD NOT BRANCH
1197	002514	000401	BR	.+4	
1198	002516	000000	HLT		;BHIS BRANCH FAILED
1199	002520	000240	SCOPE		
1200					
1201					
1202	002522	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1203	002524	000000	HLT		;BLOS BRANCH FAILED
1204	002526	000240	SCOPE		
1205					
1206	002530	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1207	002532	000401	BR	.+4	
1208	002534	000000	HLT		;BHI BRANCH FAILED
1209	002536	000240	SCOPE		
1210					
1211	002540	000257	CCC		
1212	002542	000264	SEZ		;4
1213					
1214	002544	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1215	002546	000000	HLT		;BEQ BRANCH FAILED
1216	002550	000240	SCOPE		
1217					
1218	002552	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1219	002554	000401	BR	.+4	
1220	002556	000000	HLT		;BNE BRANCH FAILED
1221	002560	000240	SCOPE		
1222					
1223					
1224	002562	002001	BGE	.+4	;BGE SHOULD BRANCH

1225	002564	000000	HLT		;BGE BRANCH FAILED
1226	002566	000240	SCOPE		
1227					
1228	002570	002401	BLT	.+4	;BLT SHOULD NOT BRANCH
1229	002572	000401	BR	.+4	
1230	002574	000000	HLT		;BLT BRANCH FAILED
1231	002576	000240	SCOPE		
1232					
1233					
1234	002600	003401	BLE	.+4	;BLE SHOULD BRANCH
1235	002602	000000	HLT		;BLE BRANCH FAILED
1236	002604	000240	SCOPE		
1237					
1238	002606	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1239	002610	000401	BR	.+4	
1240	002612	000000	HLT		;BGT BRANCH FAILED
1241	002614	000240	SCOPE		
1242					
1243					
1244	002616	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1245	002620	000000	HLT		;BHIS BRANCH FAILED
1246	002622	000240	SCOPE		
1247					
1248	002624	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1249	002626	000401	BR	.+4	
1250	002630	000000	HLT		;BLO BRANCH FAILED
1251	002632	000240	SCOPE		
1252					
1253					
1254	002634	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1255	002636	000000	HLT		;BLOS BRANCH FAILED
1256	002640	000240	SCOPE		
1257					
1258	002642	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1259	002644	000401	BR	.+4	
1260	002646	000000	HLT		;BHI BRANCH FAILED
1261	002650	000240	SCOPE		
1262					
1263	002652	000257	CCC		
1264	002654	000265	+SEC!SEZ		;5
1265					
1266	002656	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1267	002660	000000	HLT		;BEQ BRANCH FAILED
1268	002662	000240	SCOPE		
1269					
1270	002664	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1271	002666	000401	BR	.+4	
1272	002670	000000	HLT		;BNE BRANCH FAILED
1273	002672	000240	SCOPE		
1274					
1275					
1276	002674	002001	BGE	.+4	;BGE SHOULD BRANCH
1277	002676	000000	HLT		;BGE BRANCH FAILED
1278	002700	000240	SCOPE		
1279					
1280	002702	002401	BLT	.+4	;BLT SHOULD NOT BRANCH

1281	002704	000401	BR	.+4	
1282	002706	000000	HLT		;BLT BRANCH FAILED
1283	002710	000240	SCOPE		
1284					
1285					
1286	002712	003401	BLE	.+4	;BLE SHOULD BRANCH
1287	002714	000000	HLT		;BLE BRANCH FAILED
1288	002716	000240	SCOPE		
1289					
1290	002720	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1291	002722	000401	BR	.+4	
1292	002724	000000	HLT		;BGT BRANCH FAILED
1293	002726	000240	SCOPE		
1294					
1295					
1296	002730	103401	BLO	.+4	;BLO SHOULD BRANCH
1297	002732	000000	HLT		;BLO BRANCH FAILED
1298	002734	000240	SCOPE		
1299					
1300	002736	103001	BHIS	.+4	;BHIS SHOULD NOT BRANCH
1301	002740	000401	BR	.+4	
1302	002742	000000	HLT		;BHIS BRANCH FAILED
1303	002744	000240	SCOPE		
1304					
1305					
1306	002746	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1307	002750	000000	HLT		;BLOS BRANCH FAILED
1308	002752	000240	SCOPE		
1309					
1310	002754	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1311	002756	000401	BR	.+4	
1312	002760	000000	HLT		;BHI BRANCH FAILED
1313	002762	000240	SCOPE		
1314					
1315	002764	000257	CCC		
1316	002766	000266	+SEZ!SEV		;6
1317					
1318	002770	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1319	002772	000000	HLT		;BEQ BRANCH FAILED
1320	002774	000240	SCOPE		
1321					
1322	002776	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1323	003000	000401	BR	.+4	
1324	003002	000000	HLT		;BNE BRANCH FAILED
1325	003004	000240	SCOPE		
1326					
1327					
1328	003006	002401	BLT	.+4	;BLT SHOULD BRANCH
1329	003010	000000	HLT		;BLT BRANCH FAILED
1330	003012	000240	SCOPE		
1331					
1332	003014	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1333	003016	000401	BR	.+4	
1334	003020	000000	HLT		;BGE BRANCH FAILED
1335	003022	000240	SCOPE		
1336					

1337					
1338	003024	003401	BLE	.+4	;BLE SHOULD BRANCH
1339	003026	000000	HLT		;BLE BRANCH FAILED
1340	003030	000240	SCOPE		
1341					
1342	003032	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1343	003034	000401	BR	.+4	
1344	003036	000000	HLT		;BGT BRANCH FAILED
1345	003040	000240	SCOPE		
1346					
1347					
1348	003042	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1349	003044	000000	HLT		;BHIS BRANCH FAILED
1350	003046	000240	SCOPE		
1351					
1352	003050	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1353	003052	000401	BR	.+4	
1354	003054	000000	HLT		;BLO BRANCH FAILED
1355	003056	000240	SCOPE		
1356					
1357					
1358	003060	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1359	003062	000000	HLT		;BLOS BRANCH FAILED
1360	003064	000240	SCOPE		
1361					
1362	003066	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1363	003070	000401	BR	.+4	
1364	003072	000000	HLT		;BHI BRANCH FAILED
1365	003074	000240	SCOPE		
1366					
1367	003076	000257	CCC		
1368	003100	000267	+SEZ!SEV!SEC		;7
1369					
1370	003102	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1371	003104	000000	HLT		;BEQ BRANCH FAILED
1372	003106	000240	SCOPE		
1373					
1374	003110	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1375	003112	000401	BR	.+4	
1376	003114	000000	HLT		;BNE BRANCH FAILED
1377	003116	000240	SCOPE		
1378					
1379					
1380	003120	002401	BLT	.+4	;BLT SHOULD BRANCH
1381	003122	000000	HLT		;BLT BRANCH FAILED
1382	003124	000240	SCOPE		
1383					
1384	003126	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1385	003130	000401	BR	.+4	
1386	003132	000000	HLT		;BGE BRANCH FAILED
1387	003134	000240	SCOPE		
1388					
1389					
1390	003136	003401	BLE	.+4	;BLE SHOULD BRANCH
1391	003140	000000	HLT		;BLE BRANCH FAILED
1392	003142	000240	SCOPE		

1393					
1394	003144	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1395	003146	000401	BR	.+4	
1396	003150	000000	HLT		;BGT BRANCH FAILED
1397	003152	000240	SCOPE		
1398					
1399					
1400	003154	103401	BLO	.+4	;BLO SHOULD BRANCH
1401	003156	000000	HLT		;BLO BRANCH FAILED
1402	003160	000240	SCOPE		
1403					
1404	003162	103001	BHIS	.+4	;BHIS SHOULD NOT BRANCH
1405	003164	000401	BR	.+4	
1406	003166	000000	HLT		;BHIS BRANCH FAILED
1407	003170	000240	SCOPE		
1408					
1409					
1410	003172	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1411	003174	000000	HLT		;BLOS BRANCH FAILED
1412	003176	000240	SCOPE		
1413					
1414	003200	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1415	003202	000401	BR	.+4	
1416	003204	000000	HLT		;BHI BRANCH FAILED
1417	003206	000240	SCOPE		
1418					
1419	003210	000257	CCC		
1420	003212	000270	SEN		;10
1421					
1422	003214	001001	BNE	.+4	;BNE SHOULD BRANCH
1423	003216	000000	HLT		;BNE BRANCH FAILED
1424	003220	000240	SCOPE		
1425					
1426	003222	001401	BEQ	.+4	;BEQ SHOULD NOT BRANCH
1427	003224	000401	BR	.+4	
1428	003226	000000	HLT		;BEQ BRANCH FAILED
1429	003230	000240	SCOPE		
1430					
1431					
1432	003232	002401	BLT	.+4	;BLT SHOULD BRANCH
1433	003234	000000	HLT		;BLT BRANCH FAILED
1434	003236	000240	SCOPE		
1435					
1436	003240	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1437	003242	000401	BR	.+4	
1438	003244	000000	HLT		;BGE BRANCH FAILED
1439	003246	000240	SCOPE		
1440					
1441					
1442	003250	003401	BLE	.+4	;BLE SHOULD BRANCH
1443	003252	000000	HLT		;BLE BRANCH FAILED
1444	003254	000240	SCOPE		
1445					
1446	003256	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1447	003260	000401	BR	.+4	
1448	003262	000000	HLT		;BGT BRANCH FAILED

1449	003264	000240	SCOPE		
1450					
1451					
1452	003266	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1453	003270	000000	HLT		;BHIS BRANCH FAILED
1454	003272	000240	SCOPE		
1455					
1456	003274	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1457	003276	000401	BR	.+4	
1458	003300	000000	HLT		;BLO BRANCH FAILED
1459	003302	000240	SCOPE		
1460					
1461					
1462	003304	101001	BHI	.+4	;BHI SHOULD BRANCH
1463	003306	000000	HLT		;BHI BRANCH FAILED
1464	003310	000240	SCOPE		
1465					
1466	003312	101401	BLOS	.+4	;BLOS SHOULD NOT BRANCH
1467	003314	000401	BR	.+4	
1468	003316	000000	HLT		;BLOS BRANCH FAILED
1469	003320	000240	SCOPE		
1470					
1471	003322	000257	CCC		
1472	003324	000271	+SEN!SEC		;11
1473					
1474	003326	001001	BNE	.+4	;BNE SHOULD BRANCH
1475	003330	000000	HLT		;BNE BRANCH FAILED
1476	003332	000240	SCOPE		
1477					
1478	003334	001401	BEQ	.+4	;BEQ SHOULD NOT BRANCH
1479	003336	000401	BR	.+4	
1480	003340	000000	HLT		;BEQ BRANCH FAILED
1481	003342	000240	SCOPE		
1482					
1483					
1484	003344	002401	BLT	.+4	;BLT SHOULD BRANCH
1485	003346	000000	HLT		;BLT BRANCH FAILED
1486	003350	000240	SCOPE		
1487					
1488	003352	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1489	003354	000401	BR	.+4	
1490	003356	000000	HLT		;BGE BRANCH FAILED
1491	003360	000240	SCOPE		
1492					
1493					
1494	003362	003401	BLE	.+4	;BLE SHOULD BRANCH
1495	003364	000000	HLT		;BLE BRANCH FAILED
1496	003366	000240	SCOPE		
1497					
1498	003370	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1499	003372	000401	BR	.+4	
1500	003374	000000	HLT		;BGT BRANCH FAILED
1501	003376	000240	SCOPE		
1502					
1503					
1504	003400	103401	BLO	.+4	;BLO SHOULD BRANCH

1505	003402	000000	HLT			;BLO BRANCH FAILED
1506	003404	000240	SCOPE			
1507						
1508	003406	103001	BHIS	.+4		;BHIS SHOULD NOT BRANCH
1509	003410	000401	BR	.+4		
1510	003412	000000	HLT			;BHIS BRANCH FAILED
1511	003414	000240	SCOPE			
1512						
1513						
1514	003416	101401	BLOS	.+4		;BLOS SHOULD BRANCH
1515	003420	000000	HLT			;BLOS BRANCH FAILED
1516	003422	000240	SCOPE			
1517						
1518	003424	101001	BHI	.+4		;BHI SHOULD NOT BRANCH
1519	003426	000401	BR	.+4		
1520	003430	000000	HLT			;BHI BRANCH FAILED
1521	003432	000240	SCOPE			
1522						
1523	003434	000257	CCC			
1524	003436	000272	+SEN!SEV			;12
1525						
1526	003440	001001	BNE	.+4		;BNE SHOULD BRANCH
1527	003442	000000	HLT			;BNE BRANCH FAILED
1528	003444	000240	SCOPE			
1529						
1530	003446	001401	BEG	.+4		;BEG SHOULD NOT BRANCH
1531	003450	000401	BR	.+4		
1532	003452	000000	HLT			;BEG BRANCH FAILED
1533	003454	000240	SCOPE			
1534						
1535						
1536	003456	002001	BGE	.+4		;BGE SHOULD BRANCH
1537	003460	000000	HLT			;BGE BRANCH FAILED
1538	003462	000240	SCOPE			
1539						
1540	003464	002401	BLT	.+4		;BLT SHOULD NOT BRANCH
1541	003466	000401	BR	.+4		
1542	003470	000000	HLT			;BLT BRANCH FAILED
1543	003472	000240	SCOPE			
1544						
1545						
1546	003474	003001	BGT	.+4		;BGT SHOULD BRANCH
1547	003476	000000	HLT			;BGT BRANCH FAILED
1548	003500	000240	SCOPE			
1549						
1550	003502	003401	BLE	.+4		;BLE SHOULD NOT BRANCH
1551	003504	000401	BR	.+4		
1552	003506	000000	HLT			;BLE BRANCH FAILED
1553	003510	000240	SCOPE			
1554						
1555						
1556	003512	103001	BHIS	.+4		;BHIS SHOULD BRANCH
1557	003514	000000	HLT			;BHIS BRANCH FAILED
1558	003516	000240	SCOPE			
1559						
1560	003520	103401	BLO	.+4		;BLO SHOULD NOT BRANCH

1561	003522	000401	BR	.+4	
1562	003524	000000	HLT		;BLO BRANCH FAILED
1563	003526	000240	SCOPE		
1564					
1565					
1566	003530	101001	BHI	.+4	;BHI SHOULD BRANCH
1567	003532	000000	HLT		;BHI BRANCH FAILED
1568	003534	000240	SCOPE		
1569					
1570	003536	101401	BLOS	.+4	;BLOS SHOULD NOT BRANCH
1571	003540	000401	BR	.+4	
1572	003542	000000	HLT		;BLOS BRANCH FAILED
1573	003544	000240	SCOPE		
1574					
1575	003546	000257	CCC		
1576	003550	000273	+SEN!SEV!SEC		;13
1577					
1578	003552	001001	BNE	.+4	;BNE SHOULD BRANCH
1579	003554	000000	HLT		;BNE BRANCH FAILED
1580	003556	000240	SCOPE		
1581					
1582	003560	001401	BEQ	.+4	;BEQ SHOULD NOT BRANCH
1583	003562	000401	BR	.+4	
1584	003564	000000	HLT		;BEQ BRANCH FAILED
1585	003566	000240	SCOPE		
1586					
1587					
1588	003570	002001	BGE	.+4	;BGE SHOULD BRANCH
1589	003572	000000	HLT		;BGE BRANCH FAILED
1590	003574	000240	SCOPE		
1591					
1592	003576	002401	BLT	.+4	;BLT SHOULD NOT BRANCH
1593	003600	000401	BR	.+4	
1594	003602	000000	HLT		;BLT BRANCH FAILED
1595	003604	000240	SCOPE		
1596					
1597					
1598	003606	003001	BGT	.+4	;BGT SHOULD BRANCH
1599	003610	000000	HLT		;BGT BRANCH FAILED
1600	003612	000240	SCOPE		
1601					
1602	003614	003401	BLE	.+4	;BLE SHOULD NOT BRANCH
1603	003616	000401	BR	.+4	
1604	003620	000000	HLT		;BLE BRANCH FAILED
1605	003622	000240	SCOPE		
1606					
1607					
1608	003624	103401	BLO	.+4	;BLO SHOULD BRANCH
1609	003626	000000	HLT		;BLO BRANCH FAILED
1610	003630	000240	SCOPE		
1611					
1612	003632	103001	BHIS	.+4	;BHIS SHOULD NOT BRANCH
1613	003634	000401	BR	.+4	
1614	003636	000000	HLT		;BHIS BRANCH FAILED
1615	003640	000240	SCOPE		
1616					

1617					
1618	003642	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1619	003644	000000	HLT		;BLOS BRANCH FAILED
1620	003646	000240	SCOPE		
1621					
1622	003650	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1623	003652	000401	BR	.+4	
1624	003654	000000	HLT		;BHI BRANCH FAILED
1625	003656	000240	SCOPE		
1626					
1627	003660	000257	CCC		
1628	003662	000274	+SEN!SEZ		;14
1629					
1630	003664	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1631	003666	000000	HLT		;BEQ BRANCH FAILED
1632	003670	000240	SCOPE		
1633					
1634	003672	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1635	003674	000401	BR	.+4	
1636	003676	000000	HLT		;BNE BRANCH FAILED
1637	003700	000240	SCOPE		
1638					
1639					
1640	003702	002401	BLT	.+4	;BLT SHOULD BRANCH
1641	003704	000000	HLT		;BLT BRANCH FAILED
1642	003706	000240	SCOPE		
1643					
1644	003710	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1645	003712	000401	BR	.+4	
1646	003714	000000	HLT		;BGE BRANCH FAILED
1647	003716	000240	SCOPE		
1648					
1649					
1650	003720	003401	BLE	.+4	;BLE SHOULD BRANCH
1651	003722	000000	HLT		;BLE BRANCH FAILED
1652	003724	000240	SCOPE		
1653					
1654	003726	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1655	003730	000401	BR	.+4	
1656	003732	000000	HLT		;BGT BRANCH FAILED
1657	003734	000240	SCOPE		
1658					
1659					
1660	003736	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1661	003740	000000	HLT		;BHIS BRANCH FAILED
1662	003742	000240	SCOPE		
1663					
1664	003744	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1665	003746	000401	BR	.+4	
1666	003750	000000	HLT		;BLO BRANCH FAILED
1667	003752	000240	SCOPE		
1668					
1669					
1670	003754	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1671	003756	000000	HLT		;BLOS BRANCH FAILED
1672	003760	000240	SCOPE		

1673					
1674	003762	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1675	003764	000401	BR	.+4	
1676	003766	000000	HLT		;BHI BRANCH FAILED
1677	003770	000240	SCOPE		
1678					
1679	003772	000257	CCC		
1680	003774	000275	+SEN!SEZ!SEC		;15
1681					
1682	003776	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1683	004000	000000	HLT		;BEQ BRANCH FAILED
1684	004002	000240	SCOPE		
1685					
1686	004004	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1687	004006	000401	BR	.+4	
1688	004010	000000	HLT		;BNE BRANCH FAILED
1689	004012	000240	SCOPE		
1690					
1691					
1692	004014	002401	BLT	.+4	;BLT SHOULD BRANCH
1693	004016	000000	HLT		;BLT BRANCH FAILED
1694	004020	000240	SCOPE		
1695					
1696	004022	002001	BGE	.+4	;BGE SHOULD NOT BRANCH
1697	004024	000401	BR	.+4	
1698	004026	000000	HLT		;BGE BRANCH FAILED
1699	004030	000240	SCOPE		
1700					
1701					
1702	004032	003401	BLE	.+4	;BLE SHOULD BRANCH
1703	004034	000000	HLT		;BLE BRANCH FAILED
1704	004036	000240	SCOPE		
1705					
1706	004040	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1707	004042	000401	BR	.+4	
1708	004044	000000	HLT		;BGT BRANCH FAILED
1709	004046	000240	SCOPE		
1710					
1711					
1712	004050	103401	BLO	.+4	;BLO SHOULD BRANCH
1713	004052	000000	HLT		;BLO BRANCH FAILED
1714	004054	000240	SCOPE		
1715					
1716	004056	103001	BHIS	.+4	;BHIS SHOULD NOT BRANCH
1717	004060	000401	BR	.+4	
1718	004062	000000	HLT		;BHIS BRANCH FAILED
1719	004064	000240	SCOPE		
1720					
1721					
1722	004066	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1723	004070	000000	HLT		;BLOS BRANCH FAILED
1724	004072	000240	SCOPE		
1725					
1726	004074	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1727	004076	000401	BR	.+4	
1728	004100	000000	HLT		;BHI BRANCH FAILED

1729	004102	000240	SCOPE		
1730					
1731	004104	000257	CCC		
1732	004106	000276	+SEN!SEZ!SEV		;16
1733					
1734	004110	001401	BEQ	.+4	;BEQ SHOULD BRANCH
1735	004112	000000	HLT		;BEQ BRANCH FAILED
1736	004114	000240	SCOPE		
1737					
1738	004116	001001	BNE	.+4	;BNE SHOULD NOT BRANCH
1739	004120	000401	BR	.+4	
1740	004122	000000	HLT		;BNE BRANCH FAILED
1741	004124	000240	SCOPE		
1742					
1743					
1744	004126	002001	BGE	.+4	;BGE SHOULD BRANCH
1745	004130	000000	HLT		;BGE BRANCH FAILED
1746	004132	000240	SCOPE		
1747					
1748	004134	002401	BLT	.+4	;BLT SHOULD NOT BRANCH
1749	004136	000401	BR	.+4	
1750	004140	000000	HLT		;BLT BRANCH FAILED
1751	004142	000240	SCOPE		
1752					
1753					
1754	004144	003401	BLE	.+4	;BLE SHOULD BRANCH
1755	004146	000000	HLT		;BLE BRANCH FAILED
1756	004150	000240	SCOPE		
1757					
1758	004152	003001	BGT	.+4	;BGT SHOULD NOT BRANCH
1759	004154	000401	BR	.+4	
1760	004156	000000	HLT		;BGT BRANCH FAILED
1761	004160	000240	SCOPE		
1762					
1763					
1764	004162	103001	BHIS	.+4	;BHIS SHOULD BRANCH
1765	004164	000000	HLT		;BHIS BRANCH FAILED
1766	004166	000240	SCOPE		
1767					
1768	004170	103401	BLO	.+4	;BLO SHOULD NOT BRANCH
1769	004172	000401	BR	.+4	
1770	004174	000000	HLT		;BLO BRANCH FAILED
1771	004176	000240	SCOPE		
1772					
1773					
1774	004200	101401	BLOS	.+4	;BLOS SHOULD BRANCH
1775	004202	000000	HLT		;BLOS BRANCH FAILED
1776	004204	000240	SCOPE		
1777					
1778	004206	101001	BHI	.+4	;BHI SHOULD NOT BRANCH
1779	004210	000401	BR	.+4	
1780	004212	000000	HLT		;BHI BRANCH FAILED
1781	004214	000240	SCOPE		
1782					
1783	004216	000277	SCC		;17
1784					

1785	004220	001401			BEO	.+4		;BEO SHOULD BRANCH
1786	004222	000000			HLT			;BEO BRANCH FAILED
1787	004224	000240			SCOPE			
1788								
1789	004226	001001			BNE	.+4		;BNE SHOULD NOT BRANCH
1790	004230	000401			BR	.+4		
1791	004232	000000			HLT			;BNE BRANCH FAILED
1792	004234	000240			SCOPE			
1793								
1794								
1795	004236	002001			BGE	.+4		;BGE SHOULD BRANCH
1796	004240	000000			HLT			;BGE BRANCH FAILED
1797	004242	000240			SCOPE			
1798								
1799	004244	002401			BLT	.+4		;BLT SHOULD NOT BRANCH
1800	004246	000401			BR	.+4		
1801	004250	000000			HLT			;BLT BRANCH FAILED
1802	004252	000240			SCOPE			
1803								
1804								
1805	004254	003401			BLE	.+4		;BLE SHOULD BRANCH
1806	004256	000000			HLT			;BLE BRANCH FAILED
1807	004260	000240			SCOPE			
1808								
1809	004262	003001			BGT	.+4		;BGT SHOULD NOT BRANCH
1810	004264	000401			BR	.+4		
1811	004266	000000			HLT			;BGT BRANCH FAILED
1812	004270	000240			SCOPE			
1813								
1814								
1815	004272	103401			BLO	.+4		;BLO SHOULD BRANCH
1816	004274	000000			HLT			;BLO BRANCH FAILED
1817	004276	000240			SCOPE			
1818								
1819	004300	103001			BHIS	.+4		;BHIS SHOULD NOT BRANCH
1820	004302	000401			BR	.+4		
1821	004304	000000			HLT			;BHIS BRANCH FAILED
1822	004306	000240			SCOPE			
1823								
1824								
1825	004310	101401			BLOS	.+4		;BLOS SHOULD BRANCH
1826	004312	000000			HLT			;BLOS BRANCH FAILED
1827	004314	000240			SCOPE			
1828								
1829	004316	101001			BHI	.+4		;BHI SHOULD NOT BRANCH
1830	004320	000401			BR	.+4		
1831	004322	000000			HLT			;BHI BRANCH FAILED
1832	004324	000240			SCOPE			
1833								
1834	004326	005267	000022		INC	LOOP		
1835	004332	001006			BNE	FIN		
1836	004334	012737	000207	177566	MOV	#207, @#177566		;RING BELL
1837	004342	105737	177564		TSTB	@#177564		
1838	004346	100375			BPL	-4		
1839	004350	000167	173624		JMP	200		
1840	004354	000000			0			

FIN:
 LOOP:

C04

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DOBA.P11

1841

000001

.END

429	433	437	438	442	449	453	454	459	453	464	469	470
474	478	479	483	491	492	496	500	501	505	509	513	514
519	520	524	532	536	537	542	543	547	551	555	556	561
562	566	574	575	579	583	587	588	593	597	598	603	604
606	615	619	620	625	629	630	635	639	640	645	646	650
658	659	663	667	668	672	676	677	681	695	689	690	699
703	704	709	710	714	718	719	723	727	731	732	741	742
746	750	754	755	760	761	765	769	773	774	783	787	788
793	797	798	803	804	808	812	816	817	826	827	831	835
836	840	844	848	849	854	858	859	867	871	872	877	878
882	886	890	891	896	900	901	910	911	915	919	923	924
929	933	934	939	943	944	952	956	957	962	966	967	972
976	977	983	987	988	1006	1010	1011	1016	1020	1021	1026	1030
1031	1036	1040	1041	1046	1050	1051	1058	1062	1063	1068	1072	1073
1078	1082	1083	1088	1092	1093	1098	1102	1103	1110	1114	1115	1120
1124	1125	1130	1134	1135	1140	1144	1145	1150	1154	1155	1162	1166
1167	1172	1176	1177	1182	1186	1187	1192	1196	1197	1202	1206	1207
1214	1218	1219	1224	1228	1229	1234	1238	1239	1244	1248	1249	1254
1258	1259	1266	1270	1271	1276	1280	1281	1286	1290	1291	1296	1300
1301	1306	1310	1311	1318	1322	1323	1328	1332	1333	1338	1342	1343
1348	1352	1353	1358	1362	1363	1370	1374	1375	1380	1384	1385	1390
1394	1395	1400	1404	1405	1410	1414	1415	1422	1426	1427	1432	1436
1437	1442	1446	1447	1452	1456	1457	1462	1466	1467	1474	1478	1479
1484	1488	1489	1494	1498	1499	1504	1508	1509	1514	1518	1519	1526
1530	1531	1536	1540	1541	1546	1550	1551	1556	1560	1561	1566	1570
1571	1578	1582	1583	1588	1592	1593	1598	1602	1603	1608	1612	1613
1618	1622	1623	1630	1634	1635	1640	1644	1645	1650	1654	1655	1660
1664	1665	1670	1674	1675	1682	1686	1687	1692	1696	1697	1702	1706
1707	1712	1716	1717	1722	1726	1727	1734	1738	1739	1744	1748	1749
1754	1758	1759	1764	1768	1769	1774	1778	1779	1785	1789	1790	1795
1799	1800	1805	1809	1810	1815	1819	1820	1825	1829	1830	1838	

.SAPT8	1*
.SAPTH	1*
.SAPTY	1*
.SASTA	1*
.SCATC	1*
.SCMTA	1*
.SDB2D	1*
.SDB20	1*
.SDIV	1*
.SEOP	1*
.SERRO	1*
.SERRT	1*
.SMULT	1*
.SPOWE	1*
.SRAND	1*
.SRDDE	1*
.SRDOC	1*
.SREAD	1*
.SR2AZ	1*
.SSAVE	1*
.SSB2D	1*
.SSB20	1*
.SSCOP	1*
.SSIZE	1*
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.STRAP	1*
.STYPB	1*
.STYPD	1*
.STYPE	1*
.STYPO	1*
.S4QCA	1*
.117D	1*

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 DOBA.P11 CROSS REFERENCE TABLE -- PERMANENT SYMBOLS

SEC	366	447	530	613	697	1056	1160	1264	1368	1472	1576	1680
SEN	656	697	739	1420	1472	1524	1576	1628	1680	1732		
SEV	407	447	572	613	739	1108	1160	1316	1368	1524	1576	1732
SEZ	489	530	572	613	1212	1264	1316	1368	1628	1680	1732	
TSTB	1837											
.ENABL	1											
.END	1841											
.LIST	1											
.MACR	325	992	993	994	995	996	997	998	999	1000	1001	
.MACRO	1											
.NLIST	1											
.REM	1											
.REPT	255											

ERRORS DETECTED: 0
 DEFAULT GLOBALS GENERATED: 0

*.DOBA.SEG/SOL/CRF/PAGNUM/NL:TOC=SYSMAC.CC,DOBA.P11
 RUN-TIME: 23 27 1 SECONDS
 RUN-TIME RATIO: 172/53=3.2
 CORE USED: 33K (65 PAGES)

