

BASSER COMPUTINGDEPARTMENTPUNCH AND INPUT TEST - ENG. 2.6Purpose

To test the SILLIAC output and input particularly the punch and reader.

Method

4-level characters are output and input alternately, in cycles of ten groups, thus:

	<u>Output</u>	<u>Input</u>
1st group	0123456789	0
2nd	KSNJFLO12	12
3rd	3456789K	345
4th	SNJFLO1	6789
5th	234567	KSNJF
6th	89KSN	LO1234
7th	JFLO	56789KS
8th	123	NJFLO123
9th	45	456789KSN
10th	6	JFLO123456

In addition, two erases are punched after each group of characters output. These test the skipping of 5th-hole characters by the 80--- input orders, and also provide regions of a lower tensile strength than would normally occur on an input tape.

Errors

As each group of characters is input it is tested. Any variation from the input cycle causes a stop, on 203LS. The output is switched to printer and a Black Switch start prints out (1) a word whose rightmost digits contain the actual input and (2) a word whose rightmost digits contain the correct input. The printout stops on 243L6, and if the output is switched back to punch a Black Switch start will resume the test.

Input

Following the bootstrap input, a leader, consisting of eight output cycles, is automatically punched, and the program stops on 243FF. The leader is inserted in the reader, and a Black Switch start begins the test.

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000	80	028	40	001	
001	80	028	40	002	
002	26	000	00	000	Bootstrap
001	80	028	40	000	
000	F5	001	42	001	
001	80	028	40(3N3)	by 000	
3N4	34	000	L4	404	
3N5	L5	3N9	82	028	
3N6	00	000	00	3J3	Constants
3N7	75	3J3	00	000	
3N8	00	000	LL	LLN	
3N9	01	234	56	789	
3NK	KS	NJF	LO	120	
3NS	34	567	89	K00	
3NN	SN	JFL	01	000	
3NJ	23	456	70	000	
3NF	89	KSN	00	000	Constants
3NL	JF	L00	00	000	
3JO	12	300	00	000	
3J1	45	000	00	000	
3J2	60	000	00	000	
3J3	00	000	00	000	
3J4	00	000	00	012	
3J5	00	000	00	345	
3J6	00	000	06	789	
3J7	00	000	KS	NJF	
3J8	00	00L	01	234	Constants
3J9	00	056	78	9KS	
3JK	00	NJF	LO	123	
3JS	04	567	89	KSN	
3JN	JF	L01	23	456	
3JJ	92	03L	80	028	from 000
3JF	40	003	23	3F0	Input and store sum check word.
3JL	L5	3N3	14	007	from 3F3
3FO	S4	000	L4(3N4)	by 3F2	Sum check.
				from 3JF	

3F1	40	3N3	F5	3F0
3F2	40	3F0	L0	3N4
3F3	36	3JL	L3	3N3
3F4	36	3F5		

Sum correct?

SF 000

Stop. Sum failure.

3F5	19	007	40	000
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Set number of cycles
in leader.

3F6	L5	3N5	40	3F7	from 3FN
3F7	(L5	000	82	000)	by 3F6/3F9
					from 3FK

Punch leader.

3F8	92	3N5	L5	3F7
3F9	L4	3N8	40	3F7
3FK	L0	3N7	36	3F7
3FS	L5	000	00	001
3FN	40	000	36	3F6

End of cycle?

End of leader?

3FJ	24	3FF	00	000
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Stop, to insert leader
in reader.

3FF	L5	3N5	40	3L1	from 3LS
3FL	19	024	42	3L2	
3LO	L5	3N6	42	3L3	

Set up variable
addresses in test
routine.

3L1	(L5	000	82	000)	by 3FF/3L9
					from 3LK

Output-input-test
routine.

3L2	92	3N5	81	(000)	by 3FL/3L8
3L3	40	001	L0	(000)	by 3LO/3L6
3L4	40	002	L3	002	
3L5	36	3L6			

Input correct?

20 3LS

Error stop. Black
switch to error
printout.

3L6	F5	3L3	42	3L3
3L7	19	024	L4	3L2
3L8	42	3L2	L5	3L1
3L9	L4	3N8	40	3L1

Modify variable
addresses in
test routine.

3LK	L0	3N7	36	3L1
3LS	26	3FF		

End of cycle?

2.6. 4.

3LS			L5 3L3	from 3L5
3LN	42	3LF	92 085	
3LJ	L5	001	82 028	
3LF	92	061	L5(000)	by 3LN
3LL	82	028		

24 3L6

000	26	3JJ	00 000
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003	L0	N83	8F J77
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Error printout.

Stop. Black switch
to resume rest.

Exit from
bootstrap.

Sum check word.]