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IDENTIFICATION

Shifting Binary Loader (One Card), MU SBL2

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PURPOSE

To load absolute binary program cards produced by either UA SAP or MURASS (the MURA assembler) into memory locations shifted by a constant increment from the loading addresses on the cards. To execute transfer cards.

USAGE

The user must hand punch into the sign and the address portion of the blank word at 8R of the MU SBL2 card, the (octal) increment by which it is desired to shift the actual loading addresses of the cards to be read. Transfer card addresses are not shifted.

The program is self loading. Back loader with absolute binary cards to be loaded and a transfer card. Press LOAD CARDS button.

Space Required: 0 - 23₁₀ (0 - 27₈)

Error Stop: A check sum failure results in a halt HTR 31₁₀ (HTR 37₈). Loading may not be resumed except by a manual transfer to location 4.

CODING INFORMATION

This loader will load standard SHARE UA SAP-produced absolute binary cards but in addition will load MURASS-produced absolute binary cards which differ from SHARE cards in having identifying 9L6-9L9 punches. This loader will load absolute cards having any set of identifying punches in 9L1-9L12.

The check sum is never ignored.

If the loader is left in the memory, it can be called into play for the reading of more cards by transferring to location 4.

If this loader encounters a self-loading card (e. g. another binary loader) it will ingest it and transfer control to it properly just as though the LOAD CARD button had been pushed. (To this end the self-loading card must have 9L13-9L17 unpunched.)

On encountering either a UA SAP or MURASS transfer card (they are the same) a halt transfer will be executed to the transfer address. If 9L2 be punched on such a transfer card, a transfer without stopping will be made to the transfer address.

REM SBL2 MURA SHIFTING BINARY LOADER (ONE CARD)		MU SBL2
LXA 0,4	CLEAR IRA	SBL2 0001
CPY 2,4	COPYLOADER INTO 2,9, ETC.	SBL2 0002
TXI 1,4,32767	REPEAT UNTIL LOADER IN	SBL2 0003
HTR 0	SHIFTING INCREMENT (HAND PUNCHED)	SBL2 0004
RCD	SELECT CARD READER	SBL2 0005
CPY 0	9L IN 0 AND M0	SBL2 0006
LLS 17	WORD COUNT (=WC) IN AC ADDRESS	SBL2 0007
ANA 23	EXTRACT WORD COUNT	SBL2 0008
CPY 1	9R IN 1 (CHECK SUM)	SBL2 0009
TZE 0	IF WC=0, HAVE TRANSFER CARD, GO TO IT	SBL2 0010
PAX 0,4	SET IRA=WC	SBL2 0011
ADD 0	(WC+LA) IN AC (LA=LOAD ADDRESS)	SBL2 0012
ADD 3	(WC+LA+INC) IN AC	SBL2 0013
STA 16	PLANT (WC+LA+INC) AS CPY ADDRESS	SBL2 0014
STA 17	AND AS ACL ADDRESS	SBL2 0015
CAL 0	PREPARE FOR CARD SUM	SBL2 0016
CPY 0,4	COPY WORD FROM BINARY CARD	SBL2 0017
ACL 0,4	AND ADD IT TO CARD SUM	SBL2 0018
TIX 16,4,1	REPEATING UNTIL DONE	SBL2 0019
SLW 2	FORM (CARD SUM)-(CHECK SUM)	SBL2 0020
CLA 2	X	SBL2 0021
SUB 1	X	SBL2 0022
TZE 4	IF 0, PROCEED TO NEXT CARD	SBL2 0023
HTR 31	MASK FOR WORD COUNT (HALT FOR ERROR)	SBL2 0024
END 0		SBL2 0025