

UNIVERSITY OF ILLINOIS  
DIGITAL COMPUTER

ILLINOIS CODE 54 - P8

TITLE	Tape Lettering
TYPE	Special
NUMBER OF WORDS	110
TEMPORARY STORAGE	1
DURATION	Punching Time
DESCRIPTION	<p>The tape lettering routine provides a means of readily identifying output tapes by punching any desired characters in a pictorial form at the start of the tape. It may be used in the following manner. It is read into any part of the store by means of the D.O.I. Control is automatically transferred to it with a stop after it is read in. A tape having two sexadecimal characters for each desired pictorial character is placed in the reader. When started, this tape is read two characters at a time and the corresponding pictorial characters are punched on the output tape. When the reader encounters the sexadecimal digits 00, control is transferred back to the D.O.I. with a stop. The main routine may now be read in and the results will appear on the output tape in the normal manner (not pictorial).</p>

RT: 10/13/60

DATE October 15, 1952

CODED BY T. Shapin

APPROVED BY J.P. Nash

LOCATION	ORDER	NOTES	PAGE 1	P8
	00K(P8)			
	26 1000N			
0	80 40F			
	40 50L			
1	L5 L			
	L0 5L			
2	36 6L			
	L4 5L			
3	L4 4L			
	42 L			
4	26 L			
	00 1F			
5	80 40F			
	40 110L			
6	L5 7L			
	22 1014F			
7	00 F			
	00 L			
8	00 F			
	26 L			
	26 1N			
50	00000			
	00186	Period		
51	00000			
	0000F	Space		
52	00000			Constants
	00112	-		
53	00000			
	00292	=		
54	00000			
	F0849	C		
55	00000			
	L044F	L		
56	00000			
	L0445	[		
57	00000			
	117N1	]		

LOCATION	ORDER	NOTES	PAGE 2
58	00000	(	
59	F0845		
	00000		
	11782	)	
60	00000		
	609N2	Comma.	
61	00000		
	80701	Apostrophe	
62	003N1		
	12782	D	
63	003N1		
	51445	E	
64	003N1		
	41405	F	
65	003N1		
	42SN1	H	
66	00041		
	L0441	I	
67	00082		
	12S81	J	
68	00382		
	13782	O	
69	003N1		
	42602	P	
70	003N1		
	426N2	R	
71	00242		
	52481	S	
72	00005		
	L0405	T	
73	00381		
	12S81	U	
74	00242		
	L0442	1	
75	00241		

LOCATION	ORDER		NOTES
	52482	5	
76	00382		
	52482	6	
77	00282		
	52682	8	
78	00106		
	L0506	+	
79	00382		
	L2782	0	
80	00106		
	K0906	+	
81	L0545		
	J0882	B	
82	F0841		
	51582	G	
83	L0506		
	K0841	K	
84	20845		
	50681	3	
85	80401		
	70601	7	
86	80905		
	50782	9	
87	00000		
	001N2	A	
88	N0901		
	N09N2		
89	00000		
	003N1	M	
90	80906		
	80SN1		
91	00000		
	003N1		
92	80902	N	
	20SN1		

LOCATION	ORDER		NOTES	PAGE 4
93	00000			
	00382	Q		
94	11541			
	30782			
95	00000			
	00301	V		
96	20842			
	20501			
97	00000			
	00381	W		
98	10986			
	10581			
99	00000			
	00041	X		
100	K0902			
	K0841			
101	00000			
	00201	Y		
102	408N2			
	40K01			
103	00000			
	00041	Z		
104	30541			
	90441			
105	00000			
	00242	2		
106	30541			
	50642			
107	00000			
	00082			
108	60882	4		
	K05N1			
109	00000			
	00042	/		
110	20902			

LOCATION	ORDER	NOTES
	80801	
0	81 8F 40 1F	Input two sexadecimals
1	50 37L 11 1F	
2	34 999F 14 37L	$4 \times 2^{-39}$
3	36 9L 14 37L	$4 \times 2^{-39}$
4	14 37L 32 11L	$4 \times 2^{-39}$
5	14 39L 32 14L	$19 \times 2^{-39}$
6	14 38L 36 18L	$6 \times 2^{-39}$
7	14 38L 14 38L	$6 \times 2^{-39}$
8	36 33L 24 999F	
9	14 40L 42 24L	Address of first <del>92</del> order constant
10	15 32L 42 30L	$\alpha_1$
11	22 24L 14 40L	
12	14 37L 42 24L	
13	15 31L 42 30L	$\alpha_2$
14	22 24L 14 40L	
15	14 38L 14 38L	
16	42 24L 15 43L	$\alpha_3$

LOCATION	ORDER		NOTES	PAGE 6
17	42 30L 22 24L			
18	14 41L 22 25L			
19	42 24L 15 42L		4	
20	42 30L 22 24L			
21	42 48L 10 10F			
22	42 47L 10 10F			
23	42 46L 10 10F			
24	26 27L 15 F	W	Enter here for all cases	
25	26 21L 14 3L			
26	10 49L 26 19L			
27	42 45L 15 24L			
28	10 L 42 29L		2-39	
29	00 1F 15 F	W-1		
30	42 44L 22 F	1,2,3,4, or 5	92 Orders	
31	00 F 00 47L			
32	00 F 00 48L			
33	00 1F 14 40L			
34	14 39L			

LOCATION	ORDER		NOTES
	14 39L		
35	42 24L		α5
	15 41L		
36	42 30L		
	22 24L		
37	00 F		
	00 4F		4 x 2 <sup>-39</sup>
38	00 F		
	00 6F		6 x 2 <sup>-39</sup>
39	00 F		
	00 19F		19 x 2 <sup>-39</sup>
40	00 F		
	00 50L		
41	00 F		
	00 44L		
42	00 F		
	00 45L		
43	00 F		
	00 46L		
44	00 1F		
	92 F		
45	00 1F		
	92 F		
46	00 1F		
	92 F		
47	00 1F		
	92 F		
48	00 1F		
	92 F		
49	92 2F		
	26 L		
	24 1N		



PICTORIAL  
CHARACTER

SEXADECIMAL  
CHARACTERS

PICTORIAL  
CHARACTER

SEXADECIMAL  
CHARACTERS

PUNCHED

READ

PUNCHED

READ

A

31

0

0F

B

25

1

13

C

0N

2

28

D

1L

3

22

E

1F

4

27

F

1J

5

12

G

24

6

11

H

1N

7

21

I

1S̄

8

10

J

1K

9

20

K

23

Period

04

L

0S̄

Comma

06

M

30

Apostrophe

05

N

2L

Space

03

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19

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0L

P

18

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02

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29