

TO: MSPM Distribution
FROM: R. M. Graham
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The attached revised version of BE.5.08 reflects the character set change described in M0083.

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Identification

Character Escape Conventions for IBM 026 Keypunches
D. Widrig

Purpose

During early phases of Multics testing and debugging, it will be necessary to utilize both IBM 026 card punches and the GE 029 card punches. Although the escape conventions for the old ASCII code set are described in BC.2.04, MSPM, there is no set of standard escapes for the IBM 026 card punch using IBM character set "H". This document provides a set of standard escapes, (similar in spirit to the escape conventions mentioned in BC.2.04, MSPM) which will enable the user to represent the revised ASCII character set on punched cards. Note that these conventions are interim conventions until older IBM 026 card punches are replaced with the newer models containing extended character sets. After replacement of the punches, it is expected that the escape conventions mentioned in BC.2.04, MSPM, will be the only standard.

Discussion

The escape character for the IBM 026 card punch is the apostrophe, '. It is to be considered a stylized version of the ASCII "left slant", \, the standard Multics escape characters.

Included in the set of escapes for the IBM 026 are two of the universal escapes, namely:

1. ^d₁ d₂ d₃ for the octal code d₁ d₂ d₃ (modulo 128 on input; modulo 512 on output) where d₁, d₂, d₃ are from 0 to 7.
2. ^Ck for a local (i.e., concealed) use of the character k which does not go into the computer-stored string on input and which is not in the computer-stored string on output.

In addition to the above-mentioned universal escapes, the following are available for convenience:

ESCAPE, followed by		is equivalent to
A	&	(<u>a</u> mpersand)
D	"	(<u>d</u> ouble quote)
F	<	(<u>l</u> ess than)
G	>	(<u>g</u> reater than)
L		All following alphabets interpreted as <u>l</u> ower case. This is the initial state.
M	!	(<u>e</u> xclamation)
P	%	(<u>p</u> ercent)
Q	?	(<u>q</u> uestion mark)
R	`	(<u>a</u> ccent <u>g</u> rave)
S	´	(<u>a</u> ccent <u>a</u> cute)
T	~	(<u>t</u> ilde)
U		All following alphabets interpreted as <u>u</u> pper case.
X	^	(<u>c</u> ircum <u>f</u> lex)
“([(<u>l</u> eft bracket)
”(]	(<u>r</u> ight bracket)
´n n=1,9		The next n alphabets are to be interpreted in the <u>o</u> pposite case from the present one.
/	NL	and skip rest of card
+	NL	and keep reading card
*		Skip rest of card and no NL
-	BS	(<u>b</u> ackspace)
,	;	(<u>s</u> emi-colon)

ESCAPE, ^, followed by

is equivalent to (cont.)

.	:	(colon)
=	_	(underscore)
\$		(vertical bar)
({	(left brace)
)	}	(right brace)