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Identification.

Erase and Kill Character Conventions  
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Purpose.

Experience has shown that even with sophisticated editor programs available, two minimal editing conventions at the earliest possible level are very useful for human input to a computer system. These two conventions give the typist these editing capabilities at the instant he is typing:

1. Ability to delete the last character or characters typed.
2. Ability to delete all of the current line typed up to this point.

(More complex editing capabilities must also be available, but they fall in the domain of editing programs which can work with lines previously typed as well as the current input stream.) By framing these two editing conventions in the language of the canonical form, it is possible to preserve the ability to interpret unambiguously a typed line image despite the fact that editing was required.

Erase convention

The first editing convention is that one graphic, the number sign (#), is reserved as the erase character. When this character appears as the only graphic in a print position, it erases itself and the contents of the previous print position. When it is not the only graphic in a print position, it erases the print position in which it appears. If the erase follows simple carriage motion, the carriage motion is erased. Several successive erase characters will erase an equal number of preceding print positions or simple carriage motions. Since erase processing occurs after the transformation to canonical form, there is no ambiguity as to which print position has been erased; the printed line image is always the guide. Whenever a print position is erased, the carriage motion (if any) on the two sides of the erased print position are combined into a single carriage motion.

Kill convention.

The second editing convention reserves another graphic, the at sign (@), as the kill character. When this character appears as the only graphic in a print position, the contents of that line up to and including the kill character are discarded. Again, since the kill processing occurs after the conversion to canonical form, there can be no ambiguity about which characters have been discarded. By convention, kill is done before erase, so that it is not possible to erase a kill character.

Examples.

## Example 1:

```
Typist:      abcx##de <sp> <BS> fzz##g <NL>
Printed line: abcx##defzz##g
Canonical form: abcx##defzz##g <NL>
Final input:  abcdefg <NL>
```

This example represents the primary use of the erase character, correcting typing errors the moment they are noted. Note that the erroneous space between e and f was not erased, it was undone.

## Example 2:

```
Typist:      get <HT> x##lda <HT> <SP> <SP> word <NL>
Printed line: get      x##lda      word
Canonical form: get      x##lda      word <NL>
Final input:  get      lda      word <NL>
```

The typist places two spaces after his second horizontal tab because his program has a fixed format input and demands 7 spaces, and the fixed horizontal tab only moves 5 spaces now. This example demonstrates that programs should not generally require fixed format input.

## Example 3:

```
Typist:
This @The off <BS> <BS> <BS> ___##n <BS> _ state <NL>
Printed line:
This @The off##n state
Canonical form:
This @The _ <BS> o_ <BS> f_ <BS> f##_ <BS> n state <NL>
Final input:
The _ <BS> o_ <BS> n state <NL>
Printed appearance of final form:
The on state
```