

The T_EXpert's Repertory

(A) T_EX has only “until line end” comments. Find a way to comment out arbitrary passages—the syntax might be

```
\comment anything\tnemmoc.
```

The difficulty is, of course, that **anything** might in fact contain anything (except `\tnemmoc`), e.g., wrongly nested braces.—Variant: The same, with an arbitrary (swallowed) begin-sign that serves as a (swallowed) end-sign; call it, say, `\comm`.—Not very hard (much easier than verbatim).

(B) T_EX has no `letterspacing` (occasionally used for emphasis in English, frequently in French and German, exclusively with Fraktur / Gothic; called *ritkítás* in Hungarian). The suggested syntax is (in conformance with analogous switches)

```
{\ls text}.
```

This *is* difficult. (Designing “spaced” fonts would be overdoing it, and would bring in the problem of spurious spacings at line ends.) My solution is not really general either: it disables T_EX’s automatic hyphenation (explicit ‘discretionary \-’ must be used). I’ve been unable to find a *one-pass* procedure compatible with the hyphenation automatism—I can’t explicitly insert implicit kerns—; there is a two-pass idea that could work but is so formidable as to deter me from implementing it. A clever algorithm would be welcome.

(C) Token analysis: To tell, e.g., whether the next `<token>` is, or resolves to, ‘printable’ character(s). (Useful for the previous problem, and generally.) T_EX (while knowing it all) makes it difficult to find out. It’s a pleasure to watch how the first three (or more) plausible ideas fail.

(D) The following needs very little code (but a good understanding of T_EX):

- ▷ Hungarian, German, French quotes etc. (E.g., „X”, „X“, «X»).
- ▷ For an *í*, `\’i` should suffice (rather than `\’{\i}` or `\’\i{}`); similarly *ì*, *ï* etc.—Drop the starting backslash, too: `’a`, `’i`, `”o`, `”u` etc. (but don’t utterly cripple other functions of `’`, `”` etc.).
- ▷ Non-breaking hyphen (avoiding line breaks at non-divisive hyphens such as 3-D, where 3-D should stick together)—often needed in agglutinative languages.
- ▷ Absolute positioning: `\setpos(<dimen x>,<dimen y>)`.
- ▷ `\blackhole`: write / draw anything *without taking space*.
- ▷ In sums and products put the variable in the middle (its original place, preferred by Gauß, Ehrenfest, von Neumann, etc., fallen victim to printers’ indolence), e.g., $\sum_0^{\infty} n$; denote it, say, `\SUM(n:0;\infty)`.