NAME
lacheck - a consistency checker for LaTeX documents

SYNOPSIS
lacheck filename[.tex]

DESCRIPTION
LaCheck is a general purpose consistency checker for LaTeX documents. It reads a LaTeX
document and displays warning messages, if it finds bad sequences. It should be noted, that the
badness is very subjective. LaCheck is designed to help find common mistakes in LaTeX
documents, especially those made by beginners.

The things checked are:
Mismatched groups (braces), environments and math mode delimiters. When a mismatch is
found, line numbers for both start and end of the mismatch is given. The error messages comes in
pairs, one for the end match and one for the beginning, marked with `<-' and `->' respectively.

Bad spacing including missing a `
` after an abbreviation, missing an `
@` before a punctuation
mark in a paragraph that is ended by an capital letter, double spaces like ` ` , bad usage of ellipsis
(like using ... instead of `\ldots`, or using `\ldots` where `\cdots` should be used), missing `before a
`\cite` or `\ref` commands, space before footnotes, italic corrections before comma, point, or italic
text, italic correction after normal text, missing italic correction when switching from italic to
normal text, and double italic correction.

Badly placed punctuation marks around end of math mode delimiters. This is, punctuation placed
right after display math end or punctuation placed right before text math end. Sequences of
whitespace followed by punctuation marks are also caught.

Bad use of quotation characters, i.e. constructs like `"word"` or "word" are warned about, tabs in
verbatim environments are caught, certain TeX primitives are frowned upon, attempts to give font
specifiers arguments such as `\em{text}` are noted, and use of `@` in LaTeX macros are reported.

LaCheck will read files that are input using `\input` or `\include`. Files with suffix `.sty` are omitted,
as they probably will cause LaCheck to crash.

LaCheck may be invoked from within emacs(1) using M-x compile. To run: **M-x compile RET
lacheck RET**, and then **C-x * to parse the messages**

OUTPUT
The output is UNIX-error like, and may be parsed using Emacs(1) compile mode. Here is a
sample:

lacheck compiler
"/usr/mef/compiler.tex", line 34: missing `\\ ` after "etc."
"/usr/mef/compiler.tex", line 179: double space at " ~"
"/usr/mef/compiler.tex", line 186: `<- unmatched "}
"/usr/mef/compiler.tex", line 181: `-> unmatched "$$

A control space `\ ` should be inserted at line 34, to prevent an end-of-sentence space. Also, at
line 179, the first space of the sequence " ~" should probably be deleted. The last two lines is an
example, where the user mistyped, and probably inserted an extra "}" somewhere.
DIAGNOSTICS
Some special cases should be explained. In cases where a sentence ends with something that
LaCheck thinks is an abbreviation an missing `\` error may also occur, if the following sentence
begins with a lowercase letter.

A mismatch error may cause more to follow, due to the lack of good error recovery. In such
cases, just correct the first error and run LaCheck again.

Braces, environments and math mode must be balanced within a file.

LaCheck may be confused by unmatched stuff placed inside verbatim-like environments called
something else than exactly `verbatim`.

SEE ALSO
tex(1), emacs(1), latex(1)

BUGS
LaCheck gets confused by advanced macros, is fooled by simple macros, can’t figure out if you
use a non-standard way to switch italic on or off, does not like TeX at all, does not provide any
options to turn off specific warnings, and is at best a crude approximation.

Ideas for improvements and bug reports are very welcome. Such should be directed to the
maintainers; please email tex-live@tug.org.

AUTHOR
Kresten Krab Thorup with modifications by Per Abrahamsen. Currently maintained as part of
TeX Live (https://tug.org/texlive).