

of 10pt in its definition of @makecaption and I couldn't figure out how to change it to a rubber length. I also tried putting \caption in a parbox but that did the same thing.

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Queries

Title formatting macro wanted

I have a peculiar problem that seems made for T_EX's typesetting capabilities. The problem is the following:

Given an input list consisting of words separated by spaces (not control sequences), produce a title block of entirely capitalized words, double-spaced, centered, and (gasp!) in inverted pyramid form. I would like the lines produced in general not to be of vastly differing lengths (no long lines followed by singletons, please), and I would prefer that line breaks in titles, if the rest of the criteria are met, occur at commas in preference to just being between words.

I admit that this may be a very tall order, but as a newcomer to T_EX I have quickly come to realize the vast power of this typesetting system and can only hope that such a macro already exists. If I have placed too many limitations on the macro as it stands, please inform me of any solutions to the "inverted pyramid" problem and I will fiddle with them as best as possible to produce what I need.

I am using L^AT_EX, if that is of any help in finding an "inverted pyramid" macro.

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Reply: Printing Out Selected Pages

Donald Knuth's reply to Helen Horstman in TUGboat Vol. 8, No. 2 (p. 217, "Print Out Selected Pages") contains a bug which can cause the omission of pages from the output, even if they were specified in the pages.tex file. Specifically, if the page number of the first page processed is greater than the first requested page, then no pages will be printed.

Here is an example:

```
\count0=2
This is the text for page 2.
\vfil\eject
This is the text for page 3.
\bye
```

If the pages.tex file contains the lines

```
1
3
```

the first page number will never be matched, and no pages will be printed.

The correction is a change to the logic in the \shipout macro, given below (which includes the change to the macro \loop given on p. 184 of the same issue). Each time T_EX is to ship out a page, it tests to see if the page number is greater than the requested page. If so, it gets another number from the pages.tex file, continuing this test until either (a) the end of pages.tex is encountered, or (b) the requested page number is greater than or equal to the current page number.

```
\def\loop#1\repeat{\def\iterate
  {#1\expandafter\iterate\fi}%
  \iterate}
\def\breakout{\let\iterate\relax}
% This lets us "escape" from a \loop
\let\repeat\fi
\def\shipout{\begingroup
  \loop
  \ifeof\pages \aftergroup\Shipout
  \else \ifnum\pageno>\nextpage
    \getnextpage
  \else \breakout
    \ifnum\pageno=\nextpage
      \aftergroup\Shipout
    \else \aftergroup\Tosspage \fi
  \fi \repeat\endgroup }
```

(Note to users of the new \loop: I used \aftergroup to "hold off" on executing either \Shipout or \Tosspage because the \expandafter technique doesn't quite work due to the nesting of \if... \fi within \loop... \repeat. The alternative,

```
\expandafter\Tosspage\expandafter ...
```

where we add enough `\expandafter's` to get past the `\repeat`, is probably not worth the effort.

If a solution without grouping is required, we could take advantage of the fact that `\loop` ends with an assignment, and substitute `\afterassignment`.)

As with the original, the page numbers in `pages.tex` must appear in the order they will be generated. However, the change means that the signal value used to inform `TEX` that no more pages are to be printed must not be less than any page number in the file. Given a page number *larger* than any existing page number, the macro will behave correctly.

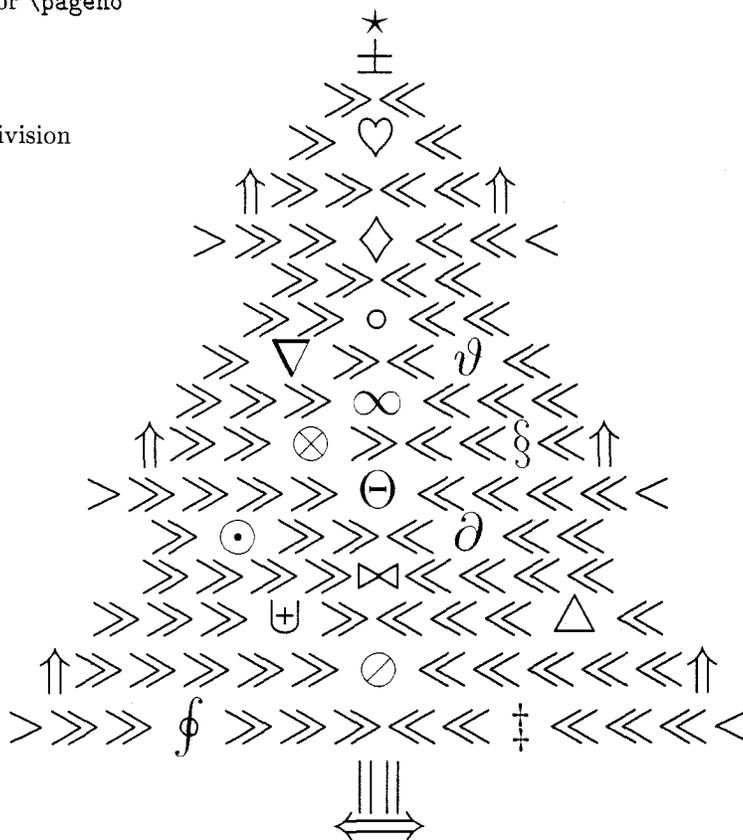
E.g., the use of “-999999” as in Knuth's example `pages.tex` file would cause `\getnextpage` to attempt to read another page number from the file, which would cause an ‘eof’, and all remaining pages in the file would be printed. Changing the last value to “999999” restores the intended behavior.

By the way, for `LATEX` users, the only change required is to substitute `\value{page}` for `\pageno` wherever it occurs.

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Editor's note: When answering a query, please send a copy of your answer to the TUGboat editor as well as to the author of the query. Answers will be published in the next issue following their receipt.

Merry TEXmas



Editor's note: This traditional X-mas tree for mathematicians and `TEX`nicians was created by Irene Hyna of the Technical University of Vienna, and forwarded by Hubert Partl to `TEXhax` (1986, issue 15). Our warmest greetings to them both.