

Is there a pearl?

Natror (Grzegorz Murzynowski)

Sulejówek

Poland

natror at o2.pl

Abstract

T_EX maybe-pearls divden from the gmdoc bundle: italics or `\show` inside a verbatim and verbatim input of selected lines of a file.

```
\catcode'\^^E\active
\def^^E{\bgroup\it}
\catcode^^F2%
\begin{verbatim*}
How do you get (char5)italics(char6) inside
a~verbatim?
\end{verbatim*}
```

Figure 1: Italic source...

How do you get *italics* inside a~verbatim?

Figure 2: ... and output.

1 How do you get *italics* inside a verbatim?

By ‘a verbatim’ I mean a L^AT_EX’s environment that changes the catcodes of special chars and thus allows typesetting them verbatim. L^AT_EX’s `\begin{verbatim}` expands mostly to

```
\begingroup\csname\verbatim\endcsname
and \verbatim acts mostly like DEK’s \ttverbatim
and \end{verbatim} is needed to delimit \verbatim’s
argument.
```

Let’s remind that the chars of codes 1–32 (except the line end etc.) are catcoded as ‘invalid’ in L^AT_EX. Therefore I dare to assume there are not used neither present in decent (L^A)T_EX files.

The verbatim environments do not recatcode them.

So I can use them for my wicked purpose: fig. 1 and 2.

Note that we should use explicit `(char5)` and `(char6)` since verbatims recatcode `~` to ‘other’ so `^^E` would produce just `^^E`.

This trick I used first for debugging: to `\show` something from inside a verbatim.

2 How to input lines 2 and 24–27 of a file verbatim?

The code given in fig. 3 results in the output presented in fig. 4. What is the most fundamental

```
\long\def\firstofone#1{#1}
\makeatletter
\newread\my@file
\openin\my@file=pearlsEBT.tex\relax
\def\my@reading#1 #2{%
\loop\ifnum\count\z@<#1%
\advance\count\z@\@ne\read\my@file
to\@tempa
\ifx.#2\@tempa\endgraf\fi\repeat}%
\firstofone{%
\begin{verbatim}%
\count\z@\z@
\my@reading1-%
\my@reading2.%
\my@reading22-%
\my@reading26.%
\end{verbatim}}
```

Figure 3: A verbatim input of selected lines of file—the source...

```
\documentclass[preprint, fleqn]{ltugproc}
\author{Natror (Grzegorz Murzynowski)}
\title{Is there a~pearl?}
\address{Sulej\'owek\Poland}
\netaddress{natror at o2.pl}
```

Figure 4: ... and output.

trick? The `\firstofone` macro (I learnt it from my T_EX Guru who didn’t invent it either). Apparently it doesn’t do anything: it has one parameter and expands exactly to it. But there is one very important thing it does: it ‘freezes’ the catcodes in the argument. Therefore all the commands and their arguments cannot be recatcoded by `\verbatim` and they are expanded and executed.