The `alltt` environment[*]

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Abstract

This package defines the `alltt` environment, which is like the `verbatim` environment except that `\`, `{`, and `}` have their usual meanings.

Thus, other commands and environments can appear within an `alltt` environment.

1 Introduction

`alltt` (*env.*) Here are some things you may want to do in an `alltt` environment:

- Change fonts–e.g., by typing `{\em emphasized text\/}`

- Insert text from a file `foo.tex` by typing `\input{foo}`. Beware that each `<return>` starts a new line, so if `foo.tex` ends with a `<return>` you can wind up with an extra blank line if you're not careful.

- Insert a math formula. Note that `$` just produces a dollar sign, so you'll have to type `\(...\)` or `\[...\]`. Also, `^` and `_` just produce their characters; use `\sp` or `\sb` for super- and subscripts, as in `\(x\sp{2}\)`.

NB When you are using `OT1` encoded fonts you might be surprised when you switch to italics, because those fonts have a different set of glyphs:

```
%  The glyph at the position of the $ in a slanted font: $.
%  The glyph at the position of the $ in an italic font: £.
%
```

2 The Implementation

1 ⟨∗package⟩

`alltt` (*env.*) The `alltt` environment is similar to the `verbatim` environment, except that `\`, `{` and `}` have their usual behaviour.

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```
 2 \begingroup
 3 \lccode`\~=`\'
 4 \lowercase{\endgroup
 5 \newenvironment{alltt}{%
 6   \trivlist
 7   \item\relax
 8     \if@minipage
 9     \else
10       \vskip\parskip
11     \fi
12     \leftskip\@totalleftmargin
13     \rightskip\z@skip
14     \parindent\z@
15     \parfillskip\@flushglue
16     \parskip\z@skip
17     \@@par
18     \@tempswafalse
19     \def\par{%
20       \if@tempswa
21         \leavevmode\null\@@par\penalty\interlinepenalty
22       \else
23         \@tempswatrue
24         \ifhmode\@@par\penalty\interlinepenalty\fi
25     \fi}
26     \obeylines
27     \verbatim@font
28     \let\org@prime~%
29     \@noligs

30     \everymath\expandafter{\the\everymath
31       \catcode`\'=12 \let~\org@prime}
32     \everydisplay\expandafter{\the\everydisplay
33       \catcode`\'=12 \let~\org@prime}
34     \let\org@dospecials\dospecials
35     \g@remfrom@specials{\\}
36     \g@remfrom@specials{\{}
37     \g@remfrom@specials{\}}
38     \let\do\@makeother
39     \dospecials
40     \let\dospecials\org@dospecials
41     \frenchspacing\@vobeyspaces
42     \everypar \expandafter{\the\everypar \unpenalty}}
43 {\endtrivlist}}
```

\g@remfrom@specials In the old implementation of the alltt package a fixed \dospecials was used. However nowadays the \dospecials command might contain more special characters at run-time then as was defined in the format. Therefore we remove the necessary special character from \dospecials at the start of the alltt environment. For this we need a macro. Remember that the list of special characters in \dospecials contains the control sequence \do between the characters. We use that to check whether a character has to be removed.

The macro \g@remfrom@specials takes one argument, the character to be removed from the list.

```
44 \def\g@remfrom@specials#1{%
```

We build up a new list in `\@new@speicals`.

```
45    \def\@new@specials{}
```

The command `\@remove` compares its argument with the argument of `\g@remfrom@specials`.

```
46    \def\@remove##1{%
47      \ifx##1#1\else
```

When they are not the same the argument of `\@remove` is added (together with `\do`) to the new list.

```
48      \g@addto@macro\@new@specials{\do ##1}\fi}
```

Now we `\let` `\do` be equal to `\@remove` and execute `\dospecials`.

```
49    \let\do\@remove\dospecials
```

All that's left is to make `\dospecials` point to the new list.

```
50    \let\dospecials\@new@specials
51    }
```

```
52 ⟨/package⟩
```