# The textcmds package

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# 1 Introduction

The textcmds package provides shorthand commands for all the text symbols that are traditionally produced in LATEX documents by non-letter ligatures. One of the principal benefits of using these commands is that it makes translating your document from LATEX to some other form (e.g., HTML) easier and less bugprone. But it also makes your document less dependent on the use of special font metric files having the required ligature information, and it makes it far easier to achieve special effects for the characters in question—for example, to add or not to add a small amount of extra space around an em-dash character. With the ligature method you have to manually add the space for each instance, whereas if you use the \mdash command, it suffices to change the definition of \mdash to suit your wishes.

All of these definitions use the preferred font-encoding-independent  $LAT_EX$  commands to obtain the characters in question.

Command	Definition	Result
\mdash	\textemdash	
\ndash	$\pm$ textendash	_
∖qd	$\textquestiondown$	i
\xd	\textexclamdown	i
\ldq	$\textquotedblleft$	"
\rdq	$\textquotedblright$	"
\lq	$\textquoteleft$	٠
\rq	\textquoteright	,

This package also provides short forms for certain text symbols whose generic name is too long for convenient entry. (The \cwm command does not produce visible output but marks word boundaries in a compound word.)

Command	Definition	Result
\bul	\textbullet	•
\vsp	\textvisiblespace	<b>_</b>
\pdc	\textperiodcentered	•
\vrt	\textbar	
\cir	\textasciicircum	^
\til	\textasciitilde	~
\bsl	\textbackslash	$\backslash$
\cwm	\textcompwordmark	

Finally, a few other miscellaneous commands are provided, including a quoting command qq. It seems clearly consonant with other parts of IATEX to write  $qq\{\ldots\}$  to quote a word or short phrase rather than  $ldq \ldots rdq$ ; and the use of higher-level markup is groundwork that must be laid if one should ever want to do anything more sophisticated at the boundaries of a quoted expression (such as automatically transposing the quote character with following punctuation, if traditional rather than logical punctuation style is desired).

Example	Definition	$\mathbf{Result}$
\qq{some text}	\ldq#1\/\rdq	"some text"
\q{some text}	\lq#1\/\rq	'some text'
\lara{some text}	\textlangle#1\textrangle	$\langle \text{some text} \rangle$
Jello\tsup{TM}	<pre>raise .9ex{\supsize#1}</pre>	$\rm Jello^{TM}$
$Jello tsub{TM}$	<pre>lower .6ex{\supsize#1}</pre>	$Jello_{TM}$
a\tprime b	<pre>\tsup{\textprimechar}</pre>	a'b

 $\langle *pkg \rangle$ 

## 2 Implementation

Package name, date, version number.

\ProvidesPackage{textcmds}[2012/08/02 v2.00]

Dashes and inverted beginning-of-sentence punctuation.

```
\providecommand{\mdash}{\textemdash\penalty\exhyphenpenalty}
\providecommand{\ndash}{\textendash\penalty\exhyphenpenalty}
\providecommand{\qd}{\textquestiondown}
\providecommand{\xd}{\textexclamdown}
```

Quote commands. Note that \lq and \rq are defined in the LATEX kernel to produce functionally different quote characters.

```
\providecommand{\ldq}{\textquotedblleft}
\providecommand{\rdq}{\textquotedblright}
\providecommand{\lsq}{\textquoteleft}
\providecommand{\rsq}{\textquoteright}
```

```
\providecommand{\bul}{\textbullet}%
\providecommand{\vsp}{\textvisiblespace}%
\providecommand{\pdc}{\textperiodcentered}%
\providecommand{\vrt}{\textbar}%
\providecommand{\cir}{\textsciicircum}%
```

```
\providecommand{\til}{\textasciitilde}%
\providecommand{\bsl}{\textbackslash}%
\providecommand{\cwm}{\textcompwordmark}%
```

```
\providecommand{\qq}[1]{\ldq#1\/\rdq}
```

```
\providecommand{\q}[1]{\lq#1\/\rq}
```

Unlike \textsuperscript and \textsubscript, these do not use math mode at all. The difference between \scriptsize and \supsize is that the former is fixed at a single constant size regardless of context, whereas the latter adapts to the current font size.

\newcommand{\supsize}{%

 $Cf \ settings.$ 

```
\expandafter\ifx\csname S@\f@size\endcsname\relax
  \calculate@math@sizes
  \fi
  \csname S@\f@size\endcsname
  \fontsize\sf@size\z@\selectfont
}
\DeclareRobustCommand{\tsup}[1]{%
  \leavevmode\raise.9ex\hbox{\supsize #1}%
}
\DeclareRobustCommand{\tsub}[1]{%
  \leavevmode\lower.6ex\hbox{\supsize #1}%
}
```

The LATEX kernel contains fallback definitions for various symbols that traditionally came from the cmsy font:

#### \DeclareTextSymbolDefault{\textbraceleft}{OMS}

But there is no definition of that kind for the cmsy prime character that we want to use for \tprime. So we need to do it here.

```
\DeclareTextSymbolDefault{\textprimechar}{OMS}
\DeclareTextSymbol{\textprimechar}{OMS}{48}
\DeclareRobustCommand{\tprime}{\tsup{\textprimechar}}
```

And one more pair of symbols that are sometimes useful in text, yet do not have suitable text definitions in the  $L^{AT}EX$  kernel. (They do in the textcomp package.)

If the textcmds package is loaded together with the textcomp package, we don't want to clobber the TS1 default.

```
\@ifundefined{textlangle}{%
   \DeclareTextSymbolDefault{\textlangle}{OMS}
   \DeclareTextSymbolDefault{\textrangle}{OMS}
}{}
\DeclareTextSymbol{\textlangle}{OMS}{"68}
\DeclareTextSymbol{\textrangle}{OMS}{"69}
```

Not sure what's the best name for the angle-brackets analog of the \qq command. How about "lara" for "left-angle right-angle"? Unlike the quotes case, it is highly unlikely that the font contains kern information for the rangle character and the character preceding it! So let's put in an italic correction.

```
\DeclareRobustCommand{\lara}[1]{\textlangle#1\/\textrangle}
```

 $\label{eq:linear} $$ csname endinput\endcsname $$ \langle /pkg \rangle $$$ 

/ prg/

Do you want some Emacs code to convert -- to \ndash while you write? And '' to \qq{ ? Try this.

```
<*emacs>
(defvar latex-ndash-command "\\ndash"
  "*String to insert for an n-dash in LaTeX mode.")
(defvar latex-mdash-command "\\mdash"
  "*String to insert for an m-dash in LaTeX mode.")
(defvar latex-quote-command "\\qq"
  "*String to insert for quotes in LaTeX mode.")
(defun latex-maybe-start-quotes (arg)
  "Insert the beginning of a \q\{\ldots\} structure if the preceding char is
a left quote."
  (interactive "*p")
  (if (= (preceding-char) ?\')
      (progn
        (delete-backward-char 1)
        (insert-and-inherit (concat latex-quote-command "\{")))
    (self-insert-command arg)))
(defun latex-maybe-end-quotes (arg)
  "Insert the end of a \\qq{...} structure if appropriate."
  (interactive "*p")
  (if (= (preceding-char) ?\')
      (progn
        (delete-backward-char 1)
        (insert-and-inherit "\}"))
    (self-insert-command arg)))
(defun latex-maybe-dash (arg)
  "Convert two or three hyphens to \\mdash or \\ndash."
  (interactive "*p")
  (cond
   ((re-search-backward
     (concat (regexp-quote latex-ndash-command) " *\\=") nil t)
    (replace-match (concat (regexp-quote latex-mdash-command) " ")))
   ((= (preceding-char) ?-)
    (delete-backward-char 1)
    (insert-and-inherit (concat latex-ndash-command " ")))
   (t (self-insert-command arg))))
```

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### 2. IMPLEMENTATION

```
(add-hook 'TeX-mode-hook
  '(lambda
    (define-key LaTeX-mode-map "\'" 'latex-maybe-start-quotes)
    (define-key LaTeX-mode-map "\'" 'latex-maybe-end-quotes)
    (define-key LaTeX-mode-map "-" 'latex-maybe-dash)))
</emacs>
```