

The trimspaces package

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Code thanks to Morten Høgholm

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1 Use of the package

This package provides a collection of space trimming macros for the L^AT_EX programmer. Tools are provided to remove either preceding space, trailing space, or both from a token list or the contents of a macro.

For an extensive discussion on this topic, see chapter fifteen of Peter Wilson's compendium of Michael Downes' 'Around the Bend' exercises:

<http://tug.ctan.org/pkg/around-the-bend>

The code that this package is based on, however, originates with Morten Høgholm. Thanks!

1.1 Trimming spaces

- `\trim@spaces {<text>}`
`\trim@pre@space {<text>}`
`\trim@post@space {<text>}`

Fully expandable, removes spaces at the beginning and/or end of *<text>*.

- `\trim@spaces@noexp {<text>}`
`\trim@pre@space@noexp {<text>}`
`\trim@post@space@noexp {<text>}`

Variants of the above that after full expansion result in the original unexpanded text stripped of surrounding spaces. (*Requires ϵ -TeX.*)

- `\trim@spaces@in <macro>`
`\trim@pre@space@in <macro>`
`\trim@post@space@in <macro>`

Re-defines `<macro>` as itself stripped of its surrounding spaces (these commands are obviously not expandable).

1.2 Examples

Trimming surrounding spaces:

```
\def\foo{bar}
\edef\a{\trim@spaces{ a \foo ! }}
\edef\aa{\trim@spaces@noexp{ aa \foo ! }}
\def\b{ b \foo ! }
\trim@spaces@in\b
a: [\detokenize\expandafter{\a}] \\  

aa: [\detokenize\expandafter{\aa}] \\  

b: [\detokenize\expandafter{\b}]
```

which produces:

```
a: [a bar!]  

aa: [aa \foo !]  

b: [b \foo !]
```

Only removing preceding spaces:

```
\def\foo{bar}
\edef\a{\trim@pre@space{ a \foo ! }}
\edef\aa{\trim@pre@space@noexp{ aa \foo ! }}
\def\b{ b \foo ! }
\trim@pre@space@in\b
a: [\detokenize\expandafter{\a}] \\  

aa: [\detokenize\expandafter{\aa}] \\  

b: [\detokenize\expandafter{\b}]
```

which produces:

```
a: [a bar! ]
aa: [aa \foo ! ]
b: [b \foo ! ]
```

Only removing trailing spaces:

```
\def\foo{bar}
\edef\a{\trim@post@space{ a \foo ! }}
\edef\aa{\trim@post@space@noexp{ aa \foo ! }}
\def\b{ b \foo ! }
\trim@post@space@in\b
a:  [\detokenize\expandafter{\a}] \\  
aa: [\detokenize\expandafter{\aa}] \\  
b:  [\detokenize\expandafter{\b}]
```

which produces:

```
a: [ a bar!]
aa: [ aa \foo !]
b: [ b \foo !]
```

2 Package information

The most recent publicly released version of `trimspaces` is available at CTAN: <http://tug.ctan.org/pkg/trimspaces/>. Historical and developmental versions are available at GitHub: <http://github.com/wspr/trimspaces/>.

While general feedback via email is welcomed, specific bugs or feature requests should be reported through the issue tracker: <http://github.com/wspr/trimspaces/issues>.

2.1 Licence

This package is freely modifiable and distributable under the terms and conditions of the L^AT_EX Project Public License,¹ version 1.3c or greater (your choice). This work consists of the source file `trimspaces.tex` and the derived files `trimspaces.sty`, `trimspaces.ins`, and the documentation `trimspaces.pdf`.

This work is author-maintained by WILL ROBERTSON.

¹Available at the L^AT_EX Project website: <http://www.latex-project.org/lppl/>

3 Implementation

LaTeX2e file 'trimspaces.sty' generated by the 'filecontents' environment from source 'trimspaces' on 2009/09/17.

```
1 \ProvidesPackage{trimspaces}[2009/09/17_v1.1
2   Trim_spaces_around_a_token_list]
```

Trimming surrounding spaces:

```
3 \catcode'\Q=3
\trim@spaces 4 \newcommand\trim@spaces[1]{%
5   \romannumeral-'\q\trim@trim@\noexpand#1Q_Q%
6 }
\trim@trim@ 7 \long\def\trim@trim@#1_Q{\trim@trim@#1Q}
\trim@trim@@ 8 \long\def\trim@trim@@#1Q#2{#1}
9 \catcode'\Q=11

\trim@spaces@noexp 10 \newcommand\trim@spaces@noexp[1]{%
11   \unexpanded\expandafter\expandafter\expandafter
12     {\trim@spaces{#1}}%
13 }

\trim@spaces@in 14 \newcommand\trim@spaces@in[1]{%
15   \edef#1{\expandafter\trim@spaces@noexp\expandafter{#1}}%
16 }
```

Trimming preceding spaces:

```
\trim@pre@space 17 \newcommand\trim@pre@space[1]{%
18   \romannumeral-'\.\expandafter\noexpand#1%
19 }

\trim@pre@space@noexp 20 \newcommand\trim@pre@space@noexp[1]{%
21   \unexpanded\expandafter{%
22     \romannumeral-'\.\expandafter\noexpand#1%
23   }%
24 }

\trim@pre@space@in 25 \newcommand\trim@pre@space@in[1]{%
26   \expandafter\def\expandafter#1\expandafter{%
27     \romannumeral-'\.\expandafter\noexpand#1%
28   }%
```

```
29 }
```

Trimming trailing space:

```
30 \catcode'\Q=3
\trim@post@space 31 \newcommand\trim@post@space[1]{\trim@trim@#1Q□Q}
32 \catcode'\Q=11
```

```
\trim@post@space@noexp 33 \newcommand\trim@post@space@noexp[1]{%
34 \unexpanded\expandafter\expandafter\expandafter
35 \expandafter\expandafter\expandafter\expandafter
36 {\trim@post@space{#1}}%
37 }
```

```
\trim@post@space@in 38 \newcommand\trim@post@space@in[1]{%
39 \edef#1{\expandafter\trim@post@space@noexp\expandafter{#1}}%
40 }
```

That's it.

<eof>