

# The noindentafter package\*

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Development of this package is organized at [latex-noindentafter.googlecode.com](https://github.com/mhelvens/latex-noindentafter).  
I am happy to receive feedback there!

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## 1 Introduction

Some people prefer certain LaTeX environments —such as `itemize` or `theorem`— never to be followed by an indented paragraph. It is of course possible to manually add the `\noindent` command to each occurrence, but it's easy to forget to do this. Also, all those `\noindent` commands leave your TeX code just a little bit more chaotic and more burdensome to read.

There are a number of solutions floating around, but many of them are not particularly robust, or only work in specific cases.

The `noindentafter` package provides a few simple commands which can be used to patch existing macros and environments. They work as expected in all cases I've encountered.

## 2 Usage

`\NoIndentAfterThis` This is the most primitive macro offered by the package. It forces a paragraph break and suppresses indentation for whatever follows:

```
 Lorem ipsum dolor sit amet, consectetur adipiscing
 elit. \NoIndentAfterThis Pellentesque hendrerit volutpat
 feugiat. Ut purus leo, pulvinar sit amet vehicula non,
 pulvinar eu lacus. Curabitur id mollis ligula.
```

```
 Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Pellentesque hendrerit volutpat feugiat. Ut purus leo, pulvinar sit amet vehic-
 ula non, pulvinar eu lacus. Curabitur id mollis ligula.
```

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\*This document corresponds to `noindentafter` 0.2.2, dated 2014/11/30.

`\NoIndentAfterEnv` {*environment*}

This is probably the command most people will want to use. The *environment* argument should contain an environment name. After using this command, any paragraph following such an environment will remain unindented.

```
 Lorem ipsum dolor sit amet, consectetur adipiscing elit.
```

```
 \begin{itemize}
   \item First Item
   \item Second Item
 \end{itemize}
```

```
 Pellentesque hendrerit volutpat feugiat. Ut purus
 leo, pulvinar sit amet vehicula non, pulvinar eu
 lacus. Curabitur id mollis ligula.
```

```
 \NoIndentAfterEnv{itemize}
```

```
 Vestibulum id erat venenatis, facilisis enim non,
 consectetur felis. Quisque iaculis eu arcu non pretium.
```

```
 \begin{itemize}
   \item Third Item
   \item Fourth Item
 \end{itemize}
```

```
 Curabitur est elit, posuere pulvinar laoreet sed, varius
 id mi. Nam lobortis elit nec mauris condimentum gravida.
```

```
 Lorem ipsum dolor sit amet, consectetur adipiscing elit.
```

- First Item
- Second Item

```
 Pellentesque hendrerit volutpat feugiat. Ut purus leo, pulvinar sit amet
 vehicula non, pulvinar eu lacus. Curabitur id mollis ligula.
```

```
 Vestibulum id erat venenatis, facilisis enim non, consectetur felis. Quisque
 iaculis eu arcu non pretium.
```

- Third Item
- Fourth Item

```
 Curabitur est elit, posuere pulvinar laoreet sed, varius id mi. Nam lobortis elit
 nec mauris condimentum gravida.
```

You'll probably want to use these commands in the document preamble but, as you can see, you don't really have to.

Note that using the `\NoIndentAfterEnv` command on your own environment is not the same as adding `\NoIndentAfterThis` to the end of it:

```
\newenvironment{test}{\itshape}{\NoIndentAfterThis}
```

```
\begin{test}
```

```
  Lorem ipsum dolor sit amet, consectetur  
  adipiscing elit.
```

```
\end{test}
```

```
Pellentesque hendrerit volutpat feugiat. Ut purus  
leo, pulvinar sit amet vehicula non, pulvinar eu  
lacus. Curabitur id mollis ligula.
```

```
Lorem ipsum dolor sit amet, consectetur adipiscing elit.
```

```
  Pellentesque hendrerit volutpat feugiat. Ut purus leo, pulvinar sit amet  
vehicula non, pulvinar eu lacus. Curabitur id mollis ligula.
```

`\NoIndentAfterEnv` works because it bypasses the group that surrounds every  $\LaTeX$  environment (and localizes declarations).

```
\NoIndentAfterCmd {<command>}
```

Finally, you may also patch command sequences using the `\NoIndentAfterCmd` command. There may not be many situations where this is useful, but for me, there is at least one:

```
  Lorem ipsum dolor sit amet, consectetur adipiscing elit:
```

```
  \[ 1 + 1 = 2 \]
```

```
  Pellentesque hendrerit volutpat feugiat. Ut purus leo:
```

```
  \NoIndentAfterCmd \]
```

```
  \[ 2 + 2 = 4 \]
```

```
  Vestibulum id erat venenatis, facilisis enim non,  
  consectetur felis.
```

```
  Lorem ipsum dolor sit amet, consectetur adipiscing elit:
```

```
          1 + 1 = 2
```

```
  Pellentesque hendrerit volutpat feugiat. Ut purus leo:
```

```
          2 + 2 = 4
```

```
  Vestibulum id erat venenatis, facilisis enim non, consectetur felis.
```

Note that braces around the `<command>` argument are optional, as always when an argument in  $\TeX$  consists of only a single token.

### 3 Acknowledgements

I had been looking for a solution like this for quite a while. I came up with a number of hacks that worked in some situations but not in others. Eventually I asked a question on <http://tex.stackexchange.com>:

- <http://tex.stackexchange.com/questions/112404>

I received two excellent answers – one from `cgieder` and one from `lockstep`. This package was originally based on the technique proposed by `cgieder`, as it is simpler and more generally applicable. Still, the answer by `lockstep` is definitely worth a read.

Most recently, a better approach was implemented by `tudscr` to fix the spacing above headers:

- <https://github.com/mhelvens/latex-noindentafter/pull/1>

### 4 Implementation

We now show and explain the entire implementation from `noindentafter.sty`.

#### 4.1 Package Info

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{noindentafter}[2014/11/30 0.2.2]
3 \prevent paragraph indentation after specific environments or macros]
```

#### 4.2 Packages

```
4 \RequirePackage{etoolbox}
```

#### 4.3 Patches

`\end` The package `etoolbox` provides the command `\AfterEndEnvironment` which creates a hook executed at a very late point inside the `\end` command. However, this hook is still located before `\ignorespaces`, which is too early to properly suppress the indentation after an environment. Therefore another hook is now added to `\end` using `\patchcmd`. This new hook puts new code at the very end.

```
5 \patchcmd\end{%
6   \if@ignore\ignorefalse\ignorespaces\fi%
7 }{%
8   \if@ignore\ignorefalse\ignorespaces\fi%
9   \csuse{@noindent@#1@hook}%
10 }{}{%
11   \PackageWarningNoLine{noindentafter}{%
12     Patching ‘\string\end’ failed!\MessageBreak%
13     ‘\string\NoIndentAfter...’ commands won’t work%
14   }%
15 }
```

## 4.4 Macros

`\NoIndentAfter` This command implements the main principle behind this package. It checks whether it is followed by a paragraph. If so, the command `\par` is temporarily changed using `\everypar`, so that the following paragraph is not indented. Immediately afterwards, default paragraph behavior is restored with `\@restorepar` (from the L<sup>A</sup>T<sub>E</sub>X base).

```
16 \newcommand*\NoIndentAfter{%
17   \@ifnextchar\par{%
18     \def\par{%
19       \everypar{\setbox\z@\lastbox\everypar{}}%
20       \@restorepar%
21     }%
22   }{}%
23 }
```

`\NoIndentAfterThis` Enforce a paragraph break and suppress indentation for whatever follows.

```
24 \newrobustcmd*\NoIndentAfterThis{\@NoIndentAfter\par\par}
```

`\NoIndentAfterEnv`  $\{\langle environment \rangle\}$

Append `\@NoIndentAfter` to the output of  $\langle environment \rangle$  by using the new environment hook.

```
25 \newrobustcmd{\NoIndentAfterEnv}[1]{%
26   \csdef{@noindent@#1@hook}{\@NoIndentAfter}%
27 }
```

`\NoIndentAfterCmd`  $\{\langle command \rangle\}$

Append `\NoIndentAfterThis` to the output of  $\langle command \rangle$ .

```
28 \newrobustcmd*\NoIndentAfterCmd}[1]{%
29   \apptocmd{#1}{\NoIndentAfterThis}{}%
30   \PackageWarning{noindentafter}{%
31     Patching ‘\string#1’ failed!\MessageBreak%
32     ‘\string\NoIndentAfterCmd’ won’t work%
33   }%
34 }%
35 }
```

## Change History

0.0.1		ing a spacing issue . . . . . 1
General: initial version . . . . . 1	0.2.2	
0.2.0		General: fixed version number in the README . . . . . 1
General: new implementation, fix-		

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Numbers written in *italics* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

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