

The `switchcase` package*

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1 Introduction

The `switchcase` package provides a simple interface for switch-case structures in LaTeX, built on top of the powerful `expl3` programming layer.

2 Usage

`\Switch` The `\Switch` command performs a string-based case selection.

```
\Switch{<string>}{<cases>}[<default>]
```

The `<cases>` should be provided as a sequence of alternating values and code blocks:
`{{val1}{code1}{val2}{code2}...}`.

`\IntSwitch` The `\IntSwitch` command performs an integer-based case selection.

```
\IntSwitch{<integer>}{<cases>}[<default>]
```

`SwitchEnv` The `SwitchEnv` environment allows for a more readable switch-case structure. Inside the environment, use `\Case` to define cases and `\Default` for the fallback.

```
\begin{SwitchEnv}{<string>}
\Case{<val1>}{<code1>}
\Case{<val2>}{<code2>}
\Default{<default code>}
\end{SwitchEnv}
```

3 Implementation

```
1 <*package>
```

`\Switch` A LaTeX2e wrapper for `\str_case:nnF`.

```
2 \NewDocumentCommand{\Switch}{m m O{}}{
3   \str_case:nnF {#1} {#2} {#3}
4 }
```

*This document corresponds to `switchcase` ?, dated ?.

```

\IntSwitch A LaTeX2e wrapper for \int_case:nnF.
5 \NewDocumentCommand{\IntSwitch}{m m 0{}}{
6   \int_case:nnF {#1} {#2} {#3}
7 }

\Case Appends a case to the current list of cases.
8 \NewDocumentCommand{\Case}{m m}{
9   \tl_put_right:Nn \l_switchcase_cases_tl { {#1}{#2} }
10 }

\Default Sets the default code to execute if no case matches.
11 \NewDocumentCommand{\Default}{m}{
12   \tl_set:Nn \l_switchcase_default_tl { #1 }
13 }

SwitchEnv Environment wrapper for a string-based switch-case selection.
14 \NewDocumentEnvironment{SwitchEnv}{m}{
15   \tl_set:Nn \l_switchcase_input_tl {#1}
16   \tl_clear:N \l_switchcase_cases_tl
17   \tl_clear:N \l_switchcase_default_tl
18 }{
19   \exp_args:NVV \str_case:nnF \l_switchcase_input_tl \l_switchcase_cases_tl { \l_switchcase_d
20 }
21 \</package>

```