

semtex: For stripped SemanT_EX documents (v0.1 β)

Sebastian Ørsted (sorsted@gmail.com)

September 7, 2020

The package `semtex` is a small package that adds a collection of simple macros for parentheses and bullets. It exists for one purpose only: To be loaded by documents which were originally typeset using the package `SemanTEX`, but which have been stripped of `SemanTEX` markup using the package `stripsemtex`. Therefore, unless your document is one of those, simply **don't use this package**.

And even if your document *is* one of those, there is a good chance you will not have to load it after all. In most cases, you will be able to replace the macros it provides by macros from other packages.

Bullet commands

The package provides the commands `\SemantexBullet` and `\SemantexDoubleBullet`. These commands print bullets which are smaller (and prettier, in my opinion) than the standard `\bullet` command from `LATEX`:

```
$ H^{\SemantexBullet} $,  
$ H^{\SemantexDoubleBullet} $  
(compare to $H^{\bullet}$)
```

H^{\cdot}, H^{\bullet} (compare to H^{\bullet})
--

You can recreate them yourself as follows, rendering the package `semtex` unnecessary for this purpose:

```
\newcommand\SemantexBullet{%  
  \raisebox{-0.25ex}{\scalebox{1.2}{\cdot}}%  
}  
\newcommand\SemantexDoubleBullet{%  
  \SemantexBullet\SemantexBullet  
}
```

Replacements for `\left` and `\right`

The package provides the commands `\SemantexLeft` and `\SemantexRight`. These work just like `\left... \right`, but fix some spacing issues around these:

```
\[  
  \SemantexLeft(  
    \frac{1}{2}  
  \SemantexRight]  
\]
```

$\left(\frac{1}{2}\right)$

They are completely equivalent to `\mleft` and `\mright` from the package `mleftright`, so it is safe to just load that package and replace the above commands by `\mleft... \mright` instead. Alternatively, you can recreate them yourself by

```

\newcommand\SemantexLeft{%
  \mathopen{}\mathclose\bgroup\left
}

\newcommand\SemantexRight{%
  \aftergroup\egroup\right
}

```

Commands for scaled delimiters

First and foremost, the package provides the command

```

\SemantexParentheses{<normal|auto|*|other>}{<left parenthesis>}{\
  {<right parenthesis>}}{<content>}}

```

This one writes $\langle content \rangle$ enclosed in the pair of parentheses and with the size given by the first argument. Here, `normal` means normal size parentheses, and `auto` and `*` mean auto-scaled parentheses using `\SemantexLeft`...`\SemantexRight`. If another value is received, that value is used for the parenthesis size, so the intended values are `\big`, `\Big`, `\bigg`, `\Bigg`:

```

$\SemantexParentheses{normal}{{}{\
  )}{\frac{a}{b}}$,
$\SemantexParentheses{auto}{{}{}{}{
  \frac{a}{b}}$,
$\SemantexParentheses{\big}{{
  \langle}{\rangle}}{\frac{a}{b}}$,
$\SemantexParentheses{\Bigg}{{\{}{
  \}}{\frac{a}{b}}$,

```

$$\left(\frac{a}{b}\right), \left[\frac{a}{b}\right], \left\langle\frac{a}{b}\right\rangle, \left\{\frac{a}{b}\right\},$$

The important property of this command is that inside the $\langle content \rangle$, you can access the delimiter size at any point using the command `\SemantexDelimiterSize`:

```

$\SemantexParentheses{\Bigg}{{\{}{\
  }}{
  \frac{a}{b}
  \SemantexDelimiterSize|
  \frac{u}{v}
}$

```

$$\left\{\frac{a}{b}\left|\frac{u}{v}\right.\right\}$$

Secondly, the package provides the command

```

\SemantexNoParentheses{<content>}

```

This command prints the content with no parentheses, but importantly, it also resets the command `\SemantexDelimiterSize` to `\{}`, i.e. blank. This makes the following work:

```

$\SemantexParentheses{\Bigg}{{\{}{\
  }}{
  \frac{a}{b}
  \SemantexDelimiterSize|
  \SemantexNoParentheses{
    a
    \SemantexDelimiterSize|
    b
  }
}$

```

$$\left\{\frac{a}{b}\left|a\right|b\right\}$$