

Test of the bracealign package compatibility with the stix2-type1 package

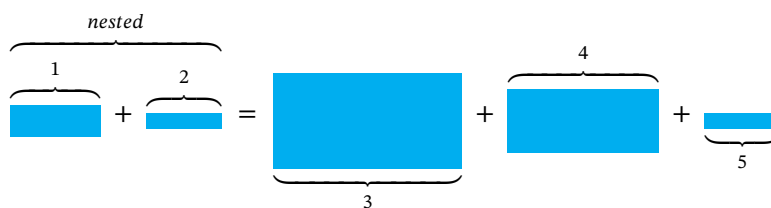
Julien Labbé

April 8, 2025

1 `\underbrace` / `\overbrace`

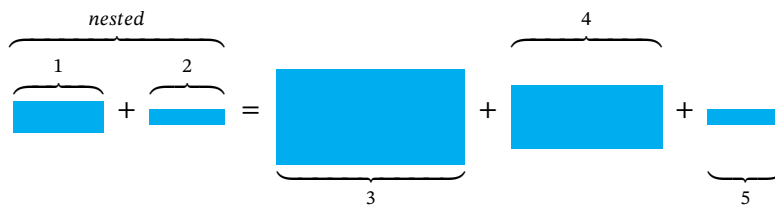
1.1 Without bracealign

```
\[
\overbrace{
\overbrace{\medcontent}^{\{1\}}
~+~
\overbrace{\smallcontent}^{\{2\}}
}^{\{nested\}}
~+~
\underbrace{\hugecontent}_{\{3\}}
~+~
\overbrace{\bigcontent}^{\{4\}}
~+~
\underbrace{\smallcontent}_{\{5\}}
\]
```

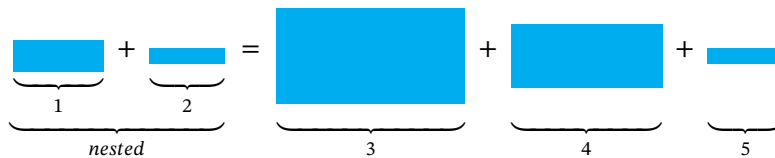


1.2 With bracealign

```
\[
\begin{bracealign}
\overbrace{
\begin{bracealign}
\overbrace{\medcontent}^{\sim{1}}
~+~
\overbrace{\smallcontent}^{\sim{2}}
\end{bracealign}
}_{\sim{nested}}
~+~
\underbrace{\hugecontent}_{\sim{3}}
~+~
\overbrace{\bigcontent}^{\sim{4}}
~+~
\underbrace{\smallcontent}_{\sim{5}}
\end{bracealign}
\]
```



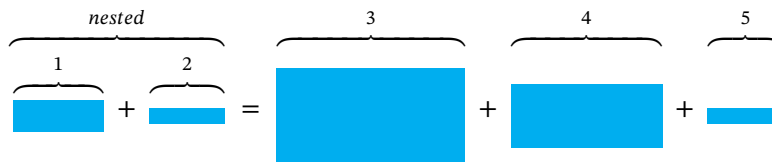
```
\[
\begin{bracealign}
\underbrace{
\begin{bracealign}
\underbrace{\medcontent}_{\sim{1}}
~+~
\underbrace{\smallcontent}_{\sim{2}}
\end{bracealign}
}_{\sim{nested}}
~+~
\hugecontent
~+~
\bigcontent
~+~
\smallcontent
\end{bracealign}
\]
```



```

\begin{bracket}
\overbrace{
\begin{bracket}
\overbrace{\medcontent}^{1}
~+~
\overbrace{\smallcontent}^{2}
\end{bracket}
}^{nested}
~+~
\overbrace{\hugecontent}^{3}
~+~
\overbrace{\bigcontent}^{4}
~+~
\overbrace{\smallcontent}^{5}
\end{bracket}

```



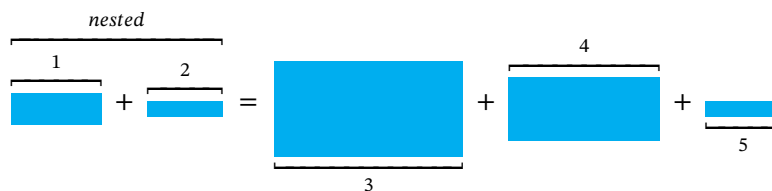
2 \underbracket / \overbracket

2.1 Without bracealign

```

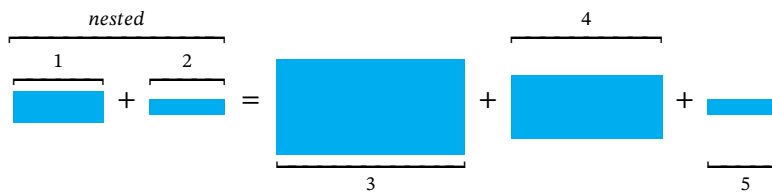
\overbracket{
\overbracket{\medcontent}^{1}
~+~
\overbracket{\smallcontent}^{2}
}^{nested}
~+~
\underbracket{\hugecontent}_{3}
~+~
\overbracket{\bigcontent}^{4}
~+~
\underbracket{\smallcontent}_{5}

```

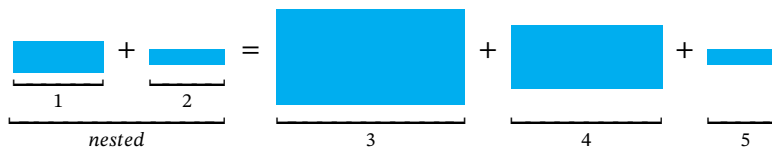


2.2 With bracealign

```
\[
\begin{bracealign}
\overbracket{
\begin{bracealign}
\overbracket{\medcontent}^{\{1\}}
~+~
\overbracket{\smallcontent}^{\{2\}}
\end{bracealign}
}_{\{nested\}}
~+~
\underbracket{\hugecontent}_{\{3\}}
~+~
\overbracket{\bigcontent}^{\{4\}}
~+~
\underbracket{\smallcontent}_{\{5\}}
\end{bracealign}
\]
```



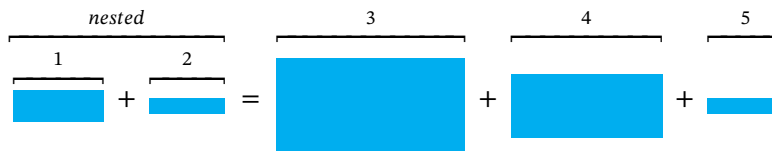
```
\[
\begin{bracealign}
\underbracket{
\begin{bracealign}
\underbracket{\medcontent}_{\{1\}}
~+~
\underbracket{\smallcontent}_{\{2\}}
\end{bracealign}
}_{\{nested\}}
~+~
\underbracket{\hugecontent}_{\{3\}}
~+~
\underbracket{\bigcontent}_{\{4\}}
~+~
\underbracket{\smallcontent}_{\{5\}}
\end{bracealign}
\]
```



```

\begin{bracket}
\overbracket{
\begin{bracket}
\overbracket{\medcontent}^{1}
~+~
\overbracket{\smallcontent}^{2}
\end{bracket}
}^{nested}
~+~
\overbracket{\hugecontent}^{3}
~+~
\overbracket{\bigcontent}^{4}
~+~
\overbracket{\smallcontent}^{5}
\end{bracket}

```



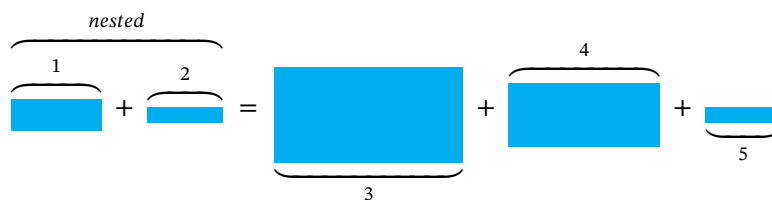
3 \underparen / \overbracket

3.1 Without bracealign

```

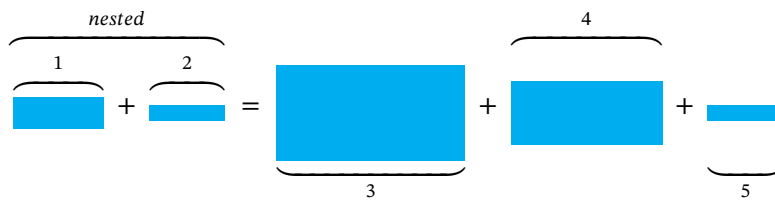
\begin{underparen}
\overparen{\medcontent}^{1}
~+~
\overparen{\smallcontent}^{2}
}^{nested}
~+~
\underparen{\hugecontent}_{3}
~+~
\overparen{\bigcontent}^{4}
~+~
\underparen{\smallcontent}_{5}
\end{underparen}

```

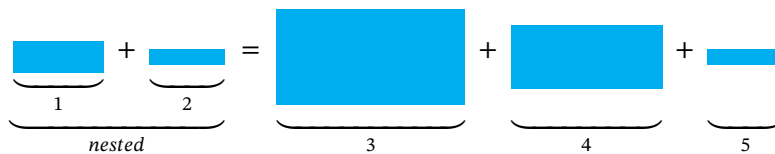


3.2 With bracealign

```
\[
\begin{bracealign}
\overparen{
\begin{bracealign}
\overparen{\medcontent}^{\sim{1}}
~+~
\overparen{\smallcontent}^{\sim{2}}
\end{bracealign}
}^{\sim{nested}}
~\!=~
\underparen{\hugecontent}_{\sim{3}}
~+~
\overparen{\bigcontent}^{\sim{4}}
~+~
\underparen{\smallcontent}_{\sim{5}}
\end{bracealign}
\]
```



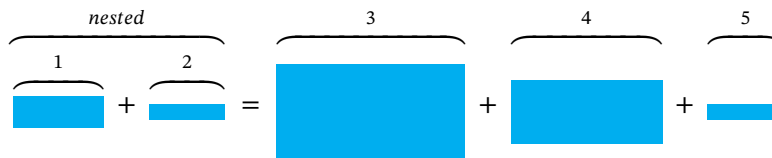
```
\[
\begin{bracealign}
\underparen{
\begin{bracealign}
\underparen{\medcontent}_{\sim{1}}
~+~
\underparen{\smallcontent}_{\sim{2}}
\end{bracealign}
}_{\sim{nested}}
~\!=~
\underparen{\hugecontent}_{\sim{3}}
~+~
\underparen{\bigcontent}_{\sim{4}}
~+~
\underparen{\smallcontent}_{\sim{5}}
\end{bracealign}
\]
```



```

\[\begin{bracealign}
  \overparen{
    \begin{bracealign}
      \overparen{\medcontent}^{\sim{1}}
      ~+~
      \overparen{\smallcontent}^{\sim{2}}
    \end{bracealign}
  }^{\sim{nested}}
  ~\equiv~
  \overparen{\hugecontent}^{\sim{3}}
  ~+~
  \overparen{\bigcontent}^{\sim{4}}
  ~+~
  \overparen{\smallcontent}^{\sim{5}}
\end{bracealign}
\]

```



3.3 Check of commands definition

3.4 `\underbrace`

```

Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underbrace\endcsname”
\par\bigskip
\begin{bracealign}
  Inside \textsf{bracealign}:\newline
  “\expandafter\meaning\csname underbrace\endcsname”
\end{bracealign}
\par\bigskip
Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underbrace\endcsname”

```

Before bracealign:

“macro:#1->\stix@underbrace {brace}{#1}”

Inside bracealign:

“\long macro:#1->\use:c {__bracealign_underbrace_std_cmd:n}{\vphantom
 {\tl_use:c {l__bracealign_underbrace_strutcontent_tl}}#1}”

Before bracealign:

“macro:#1->\stix@underbrace {brace}{#1}”

3.5 `\underbracket`

```
Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underbracket\endcsname”
\par\bigskip
\begin{bracealign}
  Inside \textsf{bracealign}:\newline
  “\expandafter\meaning\csname underbracket\endcsname”
\end{bracealign}
\par\bigskip
Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underbracket\endcsname”
```

Before bracealign:

“macro:#1->\stix@underbrace {bracket}{#1}”

Inside bracealign:

“\long macro:#1->\use:c {__bracealign_underbracket_std_cmd:n}{\vphantom
{\tl_use:c {l__bracealign_underbracket_strutcontent_tl}}#1}”

Before bracealign:

“macro:#1->\stix@underbrace {bracket}{#1}”

3.6 `\underparen`

```
Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underparen\endcsname”
\par\bigskip
\begin{bracealign}
  Inside \textsf{bracealign}:\newline
  “\expandafter\meaning\csname underparen\endcsname”
\end{bracealign}
\par\bigskip
Before \textsf{bracealign}:\newline
“\expandafter\meaning\csname underparen\endcsname”
```

Before bracealign:

“macro:#1->\stix@underbrace {paren}{#1}”

Inside bracealign:

“\long macro:#1->\use:c {__bracealign_underparen_std_cmd:n}{\vphantom
{\tl_use:c {l__bracealign_underparen_strutcontent_tl}}#1}”

Before bracealign:

“macro:#1->\stix@underbrace {paren}{#1}”