Ceci est le fichier de test de xstring

Attention : ce fichier `test_etex.tex` produit une sortie quasiment identique au fichier `test_latex.tex`, mais il doit se lancer avec Plain ε-TEX. Pour des raison d'encodage, contrairement au fichier `test_latex.tex`, les arguments des macros présentées ici ne contiennent pas de lettres accentuées.

Toutes les situations ne sont pas envisagées, mais au moins un grand nombre ! Les macros sont examinées dans l'ordre logique du code.
Lorsque le résultat contient des espaces ou peut conduire à des doutes, il sera entouré de "-", étant entendu que "--" est une chaîne vide.

Le mode `\fullexpandarg`

Le test `IfSubStr`

`\IfSubStr{abcdef}{cd}{vrai}{faux}`	vrai
`\IfSubStr{a b c d }{b c}{vrai}{faux}`	vrai
`\IfSubStr{a b c d }{bc}{vrai}{faux}`	faux
`\IfSubStr{abcdef}{}{vrai}{faux}`	faux
`\IfSubStr{a}{a}{vrai}{faux}`	vrai
`\IfSubStr{aaaa}{aa}{vrai}{faux}`	vrai
`\IfSubStr{a}{aa}{vrai}{faux}`	faux
`\IfSubStr{a}{}{vrai}{faux}`	faux
`\IfSubStr{}{a}{vrai}{faux}`	faux
`\IfSubStr{}{}{vrai}{faux}`	faux
`\IfSubStr[2]{abaca}{a}{vrai}{faux}`	vrai
`\IfSubStr[3]{abaca}{a}{vrai}{faux}`	vrai
`\IfSubStr[4]{abaca}{a}{vrai}{faux}`	faux
`\IfSubStr[-2]{abaca}{a}{vrai}{faux}`	faux

Le test `IfBeginWith`

`\IfBeginWith{abcdef}{adc}{vrai}{faux}`	faux
`\IfBeginWith{abcdef}{abcd}{vrai}{faux}`	vrai
`\IfBeginWith{ a b c }{ a}{vrai}{faux}`	vrai
`\IfBeginWith{a b c d}{ab}{vrai}{faux}`	faux
`\IfBeginWith{a}{a}{vrai}{faux}`	vrai
`\IfBeginWith{a}{aa}{vrai}{faux}`	faux
`\IfBeginWith{a}{}{vrai}{faux}`	faux
`\IfBeginWith{}{a}{vrai}{faux}`	faux
`\IfBeginWith{}{}{vrai}{faux}`	faux

Le test `IfEndWith`

`\IfEndWith{abcdef}{ab}{vrai}{faux}`	faux
`\IfEndWith{abcdef}{f}{vrai}{faux}`	vrai
`\IfEndWith{ a b c }{c}{vrai}{faux}`	faux
`\IfEndWith{ a b c }{ }{vrai}{faux}`	vrai
`\IfEndWith{a}{a}{vrai}{faux}`	vrai
`\IfEndWith{a}{aa}{vrai}{faux}`	faux
`\IfEndWith{a}{}{vrai}{faux}`	faux
`\IfEndWith{}{a}{vrai}{faux}`	faux
`\IfEndWith{}{}{vrai}{faux}`	faux

Le test `IfSubStrBefore`

`\IfSubStrBefore{abcdef}{b}{e}{vrai}{faux}`	vrai
`\IfSubStrBefore{abcdef}{e}{c}{vrai}{faux}`	faux
`\IfSubStrBefore{ a b c }{ }{b}{vrai}{faux}`	faux
`\IfSubStrBefore{ a b c }{ b}{c }{vrai}{faux}`	vrai
`\IfSubStrBefore{abcdef}{z}{a}{vrai}{faux}`	faux
`\IfSubStrBefore{abcdef}{y}{z}{vrai}{faux}`	faux
`\IfSubStrBefore{abcdef}{a}{z}{vrai}{faux}`	faux
`\IfSubStrBefore{aaa}{a}{aa}{vrai}{faux}`	faux
`\IfSubStrBefore{abcdef}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBefore{a}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBefore{}{a}{b}{vrai}{faux}`	faux
`\IfSubStrBefore{a}{}{a}{vrai}{faux}`	faux
`\IfSubStrBefore{}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBefore{}{}{}{vrai}{faux}`	faux
`\IfSubStrBefore[1,1]{abacada}{d}{a}{vrai}{faux}`	faux
`\IfSubStrBefore[1,2]{abacada}{d}{a}{vrai}{faux}`	faux
`\IfSubStrBefore[1,3]{abacada}{d}{a}{vrai}{faux}`	faux
`\IfSubStrBefore[1,4]{abacada}{d}{a}{vrai}{faux}`	vrai
`\IfSubStrBefore[2,1]{maman papa}{a}{p}{vrai}{faux}`	vrai
`\IfSubStrBefore[2,2]{maman papa}{a}{p}{vrai}{faux}`	vrai
`\IfSubStrBefore[4,2]{maman papa}{a}{p}{vrai}{faux}`	faux

Le test `IfStrBehind`

`\IfSubStrBehind{abcdef}{b}{e}{vrai}{faux}`	faux
`\IfSubStrBehind{abcdef}{e}{c}{vrai}{faux}`	vrai
`\IfSubStrBehind{ a b c }{ }{b}{vrai}{faux}`	faux
`\IfSubStrBehind{ a b c }{ c}{ a}{vrai}{faux}`	faux
`\IfSubStrBehind{abcdef}{z}{a}{vrai}{faux}`	faux
`\IfSubStrBehind{abcdef}{y}{z}{vrai}{faux}`	faux
`\IfSubStrBehind{abcdef}{a}{z}{vrai}{faux}`	faux
`\IfSubStrBehind{aaa}{a}{aa}{vrai}{faux}`	faux
`\IfSubStrBehind{abcdef}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBehind{a}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBehind{}{a}{b}{vrai}{faux}`	faux
`\IfSubStrBehind{a}{}{a}{vrai}{faux}`	faux
`\IfSubStrBehind{}{a}{a}{vrai}{faux}`	faux
`\IfSubStrBehind{}{}{}{vrai}{faux}`	faux
`\IfSubStrBehind[1,1]{abacada}{c}{a}{vrai}{faux}`	faux
`\IfSubStrBehind[1,2]{abacada}{c}{a}{vrai}{faux}`	vrai
`\IfSubStrBehind[1,3]{abacada}{c}{a}{vrai}{faux}`	faux
`\IfSubStrBehind[2,1]{maman papa}{a}{p}{vrai}{faux}`	faux
`\IfSubStrBehind[3,1]{maman papa}{a}{p}{vrai}{faux}`	vrai
`\IfSubStrBehind[3,2]{maman papa}{a}{p}{vrai}{faux}`	faux
`\IfSubStrBehind[4,2]{maman papa}{a}{p}{vrai}{faux}`	vrai

Le test `IfInteger`

`\IfInteger{156}{vrai}{faux}`	vrai
`\IfInteger{1.6}{vrai}{faux}`	faux
`\IfInteger{7a5}{vrai}{faux}`	faux
`\IfInteger{+9}{vrai}{faux}`	vrai
`\IfInteger{-15}{vrai}{faux}`	vrai
`\IfInteger{0}{vrai}{faux}`	vrai
`\IfInteger{-1,2}{vrai}{faux}`	faux

`\IfInteger{1.}{vrai}{faux}`	faux
`\IfInteger{-00}{vrai}{faux}`	vrai
`\IfInteger{+}{vrai}{faux}`	faux
`\IfInteger{-}{vrai}{faux}`	faux
`\IfInteger{.}{vrai}{faux}`	faux
`\IfInteger{}{vrai}{faux}`	faux

Le test `IfDecimal`

`\IfDecimal{6}{vrai}{faux}`	vrai
`\IfDecimal{-78}{vrai}{faux}`	vrai
`\IfDecimal{3.14}{vrai}{faux}`	vrai
`\IfDecimal{3,14}{vrai}{faux}`	vrai
`\IfDecimal{1..5}{vrai}{faux}`	faux
`\IfDecimal{-9.8}{vrai}{faux}`	vrai
`\IfDecimal{+9.8}{vrai}{faux}`	vrai
`\IfDecimal{-9,8}{vrai}{faux}`	vrai
`\IfDecimal{+9,8}{vrai}{faux}`	vrai
`\IfDecimal{+6.7.}{vrai}{faux}`	faux
`\IfDecimal{.5}{vrai}{faux}`	vrai
`\IfDecimal{1.}{vrai}{faux}`	faux
`\IfDecimal{-.99}{vrai}{faux}`	vrai
`\IfDecimal{-5.}{vrai}{faux}`	faux
`\IfDecimal{5a9.}{vrai}{faux}`	faux
`\IfDecimal{+}{vrai}{faux}`	faux
`\IfDecimal{-}{vrai}{faux}`	faux
`\IfDecimal{.}{vrai}{faux}`	faux
`\IfDecimal{}{vrai}{faux}`	faux

Le test `IfStrEq`

`\IfStrEq{abcdef}{abcdef}{vrai}{faux}`	vrai
`\IfStrEq{a b c}{a b c}{vrai}{faux}`	vrai
`\IfStrEq{abcd}{abc}{vrai}{faux}`	faux
`\IfStrEq{aab}{ab}{vrai}{faux}`	faux
`\IfStrEq{aab}{aa}{vrai}{faux}`	faux
`\IfStrEq{1.2}{1.20}{vrai}{faux}`	faux
`\IfStrEq{3,4}{3.4}{vrai}{faux}`	faux
`\IfStrEq{ }{  }{vrai}{faux}`	vrai
`\IfStrEq{}{a}{vrai}{faux}`	faux
`\IfStrEq{a}{}{vrai}{faux}`	faux
`\IfStrEq{}{}{vrai}{faux}`	vrai

Le test `IfEq`

`\IfEq{abcdef}{abcdef}{vrai}{faux}`	vrai
`\IfEq{a b c}{a b c}{vrai}{faux}`	vrai
`\IfEq{abcd}{abc}{vrai}{faux}`	faux
`\IfEq{aab}{ab}{vrai}{faux}`	faux
`\IfEq{aab}{aa}{vrai}{faux}`	faux
`\IfEq{1.2}{1.20}{vrai}{faux}`	vrai
`\IfEq{+1.0000}{1}{vrai}{faux}`	vrai
`\IfEq{-10}{10}{vrai}{faux}`	faux
`\IfEq{1,2}{1.2}{vrai}{faux}`	vrai
`\IfEq{.5}{0.5}{vrai}{faux}`	vrai
`\IfEq{,5}{0,5}{vrai}{faux}`	vrai
`\IfEq{10}{dix}{vrai}{faux}`	faux

```
\IfEq{123}{1a3}{vrai}{faux}
\IfEq{0}{}{vrai}{faux}
\IfEq{++10}{+10}{vrai}{faux}
\IfEq{--10}{+10}{vrai}{faux}
\IfEq{a}{}{vrai}{faux}
\IfEq{}{a}{vrai}{faux}
\IfEq{}{}{vrai}{faux}
```
faux
faux
faux
faux
faux
faux
vrai

La macro `StrBefore`

```
\StrBefore{abcedef}{e}
\StrBefore{abcdef}{a}
\StrBefore{abcdef}{z}
\StrBefore{a b c d}{c}
\StrBefore{a b c d}{ }
\StrBefore[2]{a b c d}{ }
\StrBefore[3]{a b c d}{ }
\StrBefore[9]{a b c d}{ }
\StrBefore[-7]{a b c d}{ }
\StrBefore{abcdef}{Z}
\StrBefore[1]{aaaaaa}{aa}
\StrBefore[2]{aaaaaa}{aa}
\StrBefore[3]{aaaaaa}{aa}
\StrBefore[4]{aaaaaa}{aa}
\StrBefore{a}{}
\StrBefore{}{a}
\StrBefore{}{}
```
abc
--
--
-a b -
-a-
-a b-
-a b c-
--
--
--
--
aa
aaaa
--
--
--
--

Mêmes exemples avec l'argument optionnel :

```
\StrBefore{abcedef}{e}[\aa]\aa
\StrBefore{abcdef}{a}[\aa]\aa
\StrBefore{abcdef}{z}[\aa]\aa
\StrBefore{a b c d}{c}[\aa]\aa
\StrBefore{a b c d}{ }[\aa]\aa
\StrBefore[2]{a b c d}{ }[\aa]\aa
\StrBefore[3]{a b c d}{ }[\aa]\aa
\StrBefore[9]{a b c d}{ }[\aa]\aa
\StrBefore[-7]{a b c d}{ }[\aa]\aa
\StrBefore{abcdef}{Z}[\aa]\aa
\StrBefore[1]{aaaaaa}{aa}[\aa]\aa
\StrBefore[2]{aaaaaa}{aa}[\aa]\aa
\StrBefore[3]{aaaaaa}{aa}[\aa]\aa
\StrBefore[4]{aaaaaa}{aa}[\aa]\aa
\StrBefore{a}{}[\aa]\aa
\StrBefore{}{a}[\aa]\aa
\StrBefore{}{}[\aa]\aa
```
abc
--
--
-a b -
-a-
-a b-
-a b c-
--
--
--
--
aa
aaaa
--
--
--
--

La macro `StrBehind`

```
\StrBehind{abcedef}{e}
\StrBehind{abcdef}{a}
\StrBehind{abcdef}{z}
\StrBehind{a b c d}{c}
\StrBehind{a b c d}{ }
\StrBehind[2]{a b c d}{ }
\StrBehind[3]{a b c d}{ }
```
def
-bcdef-
--
- d-
-b c d-
-c d-
-d-

```
\StrBehind[9]{a b c d}{ }  --
\StrBehind[-7]{a b c d}{ }  --
\StrBehind{abcdef}{Z}  --
\StrBehind[1]{aaaaaa}{aa}  aaaa
\StrBehind[2]{aaaaaa}{aa}  aa
\StrBehind[3]{aaaaaa}{aa}  --
\StrBehind[4]{aaaaaa}{aa}  --
\StrBehind{a}{}  --
\StrBehind{}{a}  --
\StrBehind{}{}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrBehind{abcedef}{e}[\aa]\aa  def
\StrBehind{abcdef}{a}[\aa]\aa  -bcdef-
\StrBehind{abcdef}{z}[\aa]\aa  --
\StrBehind{a b c d}{c}[\aa]\aa  - d-
\StrBehind{a b c d}{ }[\aa]\aa  -b c d-
\StrBehind[2]{a b c d}{ }[\aa]\aa  -c d-
\StrBehind[3]{a b c d}{ }[\aa]\aa  -d-
\StrBehind[9]{a b c d}{ }[\aa]\aa  --
\StrBehind[-7]{a b c d}{ }[\aa]\aa  --
\StrBehind{abcdef}{Z}[\aa]\aa  --
\StrBehind[1]{aaaaaa}{aa}[\aa]\aa  aaaa
\StrBehind[2]{aaaaaa}{aa}[\aa]\aa  aa
\StrBehind[3]{aaaaaa}{aa}[\aa]\aa  --
\StrBehind[4]{aaaaaa}{aa}[\aa]\aa  --
\StrBehind{a}{}[\aa]\aa  --
\StrBehind{}{a}[\aa]\aa  --
\StrBehind{}{}[\aa]\aa  --
```

La macro `StrBetween`

```
\StrBetween{abcdef}{b}{e}  cd
\StrBetween{aZaaaaZa}{Z}{Z}  --
\StrBetween[1,2]{aZaaaaZa}{Z}{Z}  -aaaa-
\StrBetween{a b c d}{a}{c}  - b -
\StrBetween{a b c d}{a }{ d}  -b c-
\StrBetween{abcdef}{a}{Z}  --
\StrBetween{abcdef}{Y}{Z}  --
\StrBetween[2,5]{aAaBaCaDa}{a}{a}  -BaCaD-
\StrBetween[4,1]{ab1ab2ab3ab4ab}{b}{a}  --
\StrBetween[3,4]{a b c d e f}{ }{ }  -d-
\StrBetween[1,3]{aaaaaa}{aa}{aa}  aa
\StrBetween{abcdef}{a}{}  --
\StrBetween{abcdef}{}{f}  --
\StrBetween{}{a}{b}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrBetween{abcdef}{b}{e}[\aa]\aa  cd
\StrBetween{aZaaaaZa}{Z}{Z}[\aa]\aa  --
\StrBetween[1,2]{aZaaaaZa}{Z}{Z}[\aa]\aa  -aaaa-
\StrBetween{a b c d}{a}{c}[\aa]\aa  - b -
\StrBetween{a b c d}{a }{ d}[\aa]\aa  -b c-
\StrBetween{abcdef}{a}{Z}[\aa]\aa  --
\StrBetween{abcdef}{Y}{Z}[\aa]\aa  --
\StrBetween[2,5]{aAaBaCaDa}{a}{a}[\aa]\aa  -BaCaD-
```

```
\StrBetween[4,1]{ab1ab2ab3ab4ab}{b}{a}[\aa]\aa  --
\StrBetween[3,4]{a b c d e f}{ }{ }[\aa]\aa  -d-
\StrBetween[1,3]{aaaaaa}{aa}{aa}[\aa]\aa  aa
\StrBetween{abcdef}{a}{}[\aa]\aa  --
\StrBetween{abcdef}{}{f}[\aa]\aa  --
\StrBetween{}{a}{b}[\aa]\aa  --
```

La macro `StrSubstitute`

```
\StrSubstitute{abcdef}{c}{ZZ}  abZZdef
\StrSubstitute{aaaaaaa}{aa}{w}  wwwa
\StrSubstitute[0]{abacada}{a}{.}  .b.c.d.
\StrSubstitute[1]{abacada}{a}{.}  .bacada
\StrSubstitute[2]{abacada}{a}{.}  .b.cada
\StrSubstitute[3]{abacada}{a}{.}  .b.c.da
\StrSubstitute[4]{abacada}{a}{.}  .b.c.d.
\StrSubstitute[5]{abacada}{a}{.}  .b.c.d.
\StrSubstitute{a b c d e}{ }{,}  a,b,c,d,e
\StrSubstitute{a b c d e}{ }{}  abcde
\StrSubstitute{abcdef}{}{A}  abcdef
\StrSubstitute{abcdef}{}{}  abcdef
\StrSubstitute{}{a}{b}  --
\StrSubstitute{}{}{}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrSubstitute{abcdef}{c}{ZZ}[\aa]\aa  abZZdef
\StrSubstitute{aaaaaaa}{aa}{w}[\aa]\aa  wwwa
\StrSubstitute[0]{abacada}{a}{.}[\aa]\aa  .b.c.d.
\StrSubstitute[1]{abacada}{a}{.}[\aa]\aa  .bacada
\StrSubstitute[2]{abacada}{a}{.}[\aa]\aa  .b.cada
\StrSubstitute[3]{abacada}{a}{.}[\aa]\aa  .b.c.da
\StrSubstitute[4]{abacada}{a}{.}[\aa]\aa  .b.c.d.
\StrSubstitute[5]{abacada}{a}{.}[\aa]\aa  .b.c.d.
\StrSubstitute{a b c d e}{ }{,}[\aa]\aa  a,b,c,d,e
\StrSubstitute{a b c d e}{ }{}[\aa]\aa  abcde
\StrSubstitute{abcdef}{}{A}[\aa]\aa  abcdef
\StrSubstitute{abcdef}{}{}[\aa]\aa  abcdef
\StrSubstitute{}{a}{b}[\aa]\aa  --
\StrSubstitute{}{}{}[\aa]\aa  --
```

La macro `StrDel`

```
\StrDel{a1a2a3a4}{a}  1234
\StrDel[2]{a1a2a3a4}{a}  12a3a4
\StrDel[-2]{a1a2a3a4}{a}  1234
\StrDel[10]{a1a2a3a4}{a}  1234
\StrDel[3]{a b c d e}{a}  b c d e
```

Mêmes exemples avec l'argument optionnel :

```
\StrDel{a1a2a3a4}{a}[\aa]\aa  1234
\StrDel[2]{a1a2a3a4}{a}[\aa]\aa  12a3a4
\StrDel[-2]{a1a2a3a4}{a}[\aa]\aa  1234
\StrDel[10]{a1a2a3a4}{a}[\aa]\aa  1234
\StrDel[3]{a b c d e}{a}[\aa]\aa  b c d e
```

La macro `StrLen`

```
\StrLen{abcdef}  6
```

```
\StrLen{a b c}  5
\StrLen{ a b c }  7
\StrLen{a}  1
\StrLen{}  0
```

Mêmes exemples avec l'argument optionnel :

```
\StrLen{abcdef}[\aa]\aa  6
\StrLen{a b c}[\aa]\aa  5
\StrLen{ a b c }[\aa]\aa  7
\StrLen{a}[\aa]\aa  1
\StrLen{}[\aa]\aa  0
```

la macro `StrMid`

```
\StrMid{abcdef}{2}{5}  bcde
\StrMid{a b c d}{2}{6}  - b c -
\StrMid{abcdef}{4}{2}  --
\StrMid{abcdef}{-4}{3}  abc
\StrMid{abcdef}{-4}{-1}  --
\StrMid{abcdef}{-4}{20}  abcdef
\StrMid{abcdef}{8}{10}  --
\StrMid{abcdef}{2}{2}  b
\StrMid{aaaaaa}{3}{6}  aaaa
\StrMid{}{4}{5}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrMid{abcdef}{2}{5}[\aa]\aa  bcde
\StrMid{a b c d}{2}{6}[\aa]\aa  - b c -
\StrMid{abcdef}{4}{2}[\aa]\aa  --
\StrMid{abcdef}{-4}{3}[\aa]\aa  abc
\StrMid{abcdef}{-4}{-1}[\aa]\aa  --
\StrMid{abcdef}{-4}{20}[\aa]\aa  abcdef
\StrMid{abcdef}{8}{10}[\aa]\aa  --
\StrMid{abcdef}{2}{2}[\aa]\aa  b
\StrMid{aaaaaa}{3}{6}[\aa]\aa  aaaa
\StrMid{}{4}{5}[\aa]\aa  --
```

La macro `StrGobbleLeft`

```
\StrGobbleLeft{abcdef}{3}  def
\StrGobbleLeft{a b c d}{3}  - c d-
\StrGobbleLeft{abcdef}{-3}  abcdef
\StrGobbleLeft{abcdef}{9}  --
\StrGobbleLeft{aaaaa}{4}  a
\StrGobbleLeft{}{2}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrGobbleLeft{abcdef}{3}[\aa]\aa  def
\StrGobbleLeft{a b c d}{3}[\aa]\aa  - c d-
\StrGobbleLeft{abcdef}{-3}[\aa]\aa  abcdef
\StrGobbleLeft{abcdef}{9}[\aa]\aa  --
\StrGobbleLeft{aaaaa}{4}[\aa]\aa  a
\StrGobbleLeft{}{2}[\aa]\aa  --
```

La macro `StrGobbleRight`

```
\StrGobbleRight{abcdef}{3}  abc
\StrGobbleRight{a b c d}{3}  -a b -
\StrGobbleRight{abcdef}{-3}  abcdef
```

```
\StrGobbleRight{abcdef}{9}  --
\StrGobbleRight{aaaaa}{4}  a
\StrGobbleRight{}{2}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrGobbleRight{abcdef}{3}[\aa]\aa  abc
\StrGobbleRight{a b c d}{3}[\aa]\aa  -a b -
\StrGobbleRight{abcdef}{-3}[\aa]\aa  abcdef
\StrGobbleRight{abcdef}{9}[\aa]\aa  --
\StrGobbleRight{aaaaa}{4}[\aa]\aa  a
\StrGobbleRight{}{2}[\aa]\aa  --
```

La macro `StrLeft`

```
\StrLeft{abcdef}{3}  abc
\StrLeft{a b c d}{3}  -a b-
\StrLeft{abcdef}{-3}  --
\StrLeft{abcdef}{9}  -abcdef-
\StrLeft{aaaaa}{4}  aaaa
\StrLeft{}{2}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrLeft{abcdef}{3}[\aa]\aa  abc
\StrLeft{a b c d}{3}[\aa]\aa  -a b-
\StrLeft{abcdef}{-3}[\aa]\aa  --
\StrLeft{abcdef}{9}[\aa]\aa  -abcdef-
\StrLeft{aaaaa}{4}[\aa]\aa  aaaa
\StrLeft{}{2}[\aa]\aa  --
```

La macro `StrRight`

```
\StrRight{abcdef}{3}  def
\StrRight{a b c d}{3}  -c d-
\StrRight{abcdef}{-3}  --
\StrRight{abcdef}{9}  -abcdef-
\StrRight{aaaaa}{4}  aaaa
\StrRight{}{2}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrRight{abcdef}{3}[\aa]\aa  def
\StrRight{a b c d}{3}[\aa]\aa  -c d-
\StrRight{abcdef}{-3}[\aa]\aa  --
\StrRight{abcdef}{9}[\aa]\aa  -abcdef-
\StrRight{aaaaa}{4}[\aa]\aa  aaaa
\StrRight{}{2}[\aa]\aa  --
```

la macro `StrChar`

```
\StrChar{abcdef}{5}  e
\StrChar{a b c d}{4}  - -
\StrChar{a b c d}{7}  d
\StrChar{abcdef}{10}  --
\StrChar{abcdef}{-5}  --
\StrChar{}{3}  --
```

Mêmes exemples avec l'argument optionnel :

```
\StrChar{abcdef}{5}[\aa]\aa  e
\StrChar{a b c d}{4}[\aa]\aa  - -
\StrChar{a b c d}{7}[\aa]\aa  d
```

```
\StrChar{abcdef}{10}[\aa]\aa  --
\StrChar{abcdef}{-5}[\aa]\aa  --
      \StrChar{}{3}[\aa]\aa  --
```

La macro `StrCount`

```
       \StrCount{abcdef}{d}  1
     \StrCount{a b c d}{ }  3
     \StrCount{aaaaaa}{aa}  3
      \StrCount{abcdef}{Z}  0
       \StrCount{abcdef}{}  0
            \StrCount{}{a}  0
             \StrCount{}{}  0
```

Mêmes exemples avec l'argument optionnel :

```
\StrCount{abcdef}{d}[\aa]\aa  1
\StrCount{a b c d}{ }[\aa]\aa  3
\StrCount{aaaaaa}{aa}[\aa]\aa  3
\StrCount{abcdef}{Z}[\aa]\aa  0
 \StrCount{abcdef}{}[\aa]\aa  0
      \StrCount{}{a}[\aa]\aa  0
       \StrCount{}{}[\aa]\aa  0
```

La macro `StrPosition`

```
    \StrPosition{abcdef}{c}  3
    \StrPosition{abcdef}{Z}  0
   \StrPosition{a b c d}{ }  2
 \StrPosition[3]{a b c d}{ }  6
 \StrPosition[8]{a b c d}{ }  0
    \StrPosition{aaaaaa}{aa}  1
 \StrPosition[2]{aaaaaa}{aa}  3
 \StrPosition[3]{aaaaaa}{aa}  5
     \StrPosition{abcdef}{}  0
          \StrPosition{}{a}  0
           \StrPosition{}{}  0
```

Mêmes exemples avec l'argument optionnel :

```
\StrPosition{abcdef}{c}[\aa]\aa  3
\StrPosition{abcdef}{Z}[\aa]\aa  0
\StrPosition{a b c d}{ }[\aa]\aa  2
\StrPosition[3]{a b c d}{ }[\aa]\aa  6
\StrPosition[8]{a b c d}{ }[\aa]\aa  0
\StrPosition{aaaaaa}{aa}[\aa]\aa  1
\StrPosition[2]{aaaaaa}{aa}[\aa]\aa  3
\StrPosition[3]{aaaaaa}{aa}[\aa]\aa  5
\StrPosition{abcdef}{}[\aa]\aa  0
\StrPosition{}{a}[\aa]\aa  0
\StrPosition{}{}[\aa]\aa  0
```

La macro `StrCompare`

La tolérance normale :

```
\StrCompare{abcdefghij}{abc}  0
          \StrCompare{A}{A}  0
\StrCompare{abcdef}{a bd}  2
          \StrCompare{ }{ }  0
       \StrCompare{}{abcd}  0
```

```
\StrCompare{abcd}{}  0
\StrCompare{123456}{1234}  0
\StrCompare{a b c d}{a bcd}  4
\StrCompare{}{}  0
\StrCompare{eee}{eeee}  0
\StrCompare{eeee}{eee}  0
\StrCompare{totutu}{tututu}  2
\StrCompare{abcd}{abyz}  3
```

Mêmes exemples avec l'argument optionnel :

```
\StrCompare{abcdefghij}{abc}[\aa]\aa  0
\StrCompare{A}{A}[\aa]\aa  0
\StrCompare{abcdef}{a bd}[\aa]\aa  2
\StrCompare{ }{ }[\aa]\aa  0
\StrCompare{}{abcd}[\aa]\aa  0
\StrCompare{abcd}{}[\aa]\aa  0
\StrCompare{123456}{1234}[\aa]\aa  0
\StrCompare{a b c d}{a bcd}[\aa]\aa  4
\StrCompare{}{}[\aa]\aa  0
\StrCompare{eee}{eeee}[\aa]\aa  0
\StrCompare{eeee}{eee}[\aa]\aa  0
\StrCompare{totutu}{tututu}[\aa]\aa  2
\StrCompare{abcd}{abyz}[\aa]\aa  3
```

La tolérance stricte :

```
\StrCompare{abcdefghij}{abc}  4
\StrCompare{A}{A}  0
\StrCompare{abcdef}{a bd}  2
\StrCompare{ }{ }  0
\StrCompare{}{abcd}  1
\StrCompare{abcd}{}  1
\StrCompare{123456}{1234}  5
\StrCompare{a b c d}{a bcd}  4
\StrCompare{}{}  0
\StrCompare{eee}{eeee}  4
\StrCompare{eeee}{eee}  4
\StrCompare{totutu}{tututu}  2
\StrCompare{abcd}{abyz}  3
```

Mêmes exemples avec l'argument optionnel :

```
\StrCompare{abcdefghij}{abc}[\aa]\aa  4
\StrCompare{A}{A}[\aa]\aa  0
\StrCompare{abcdef}{a bd}[\aa]\aa  2
\StrCompare{ }{ }[\aa]\aa  0
\StrCompare{}{abcd}[\aa]\aa  1
\StrCompare{abcd}{}[\aa]\aa  1
\StrCompare{123456}{1234}[\aa]\aa  5
\StrCompare{a b c d}{a bcd}[\aa]\aa  4
\StrCompare{}{}[\aa]\aa  0
\StrCompare{eee}{eeee}[\aa]\aa  4
\StrCompare{eeee}{eee}[\aa]\aa  4
\StrCompare{totutu}{tututu}[\aa]\aa  2
\StrCompare{abcd}{abyz}[\aa]\aa  3
```

Le mode \noexpandarg

Dans toute la suite sauf si c'est précisé, la commande `\noexpandarg` est activée.

Le test `IfSubStr`

```
                                                \noexploregroups
                  \IfSubStr{1$2$\a{34}\bc5}{2}{vrai}{faux}  vrai
                 \IfSubStr{1$2$\a{34}\bc5}{34}{vrai}{faux}  faux
               \IfSubStr{1$2$\a{34}\bc5}{{34}}{vrai}{faux}  vrai
                 \IfSubStr{1$2$\a{34}\bc5}{\b}{vrai}{faux}  faux
                \IfSubStr{1$2$\a{34}\bc5}{\bc}{vrai}{faux}  vrai
               \IfSubStr{1$2$\a{34}\bc5}{\bc5}{vrai}{faux}  vrai
            \IfSubStr{1$2$\a{34}\bc5}{\bc{5}}{vrai}{faux}  faux
        \IfSubStr[1]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
        \IfSubStr[2]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
        \IfSubStr[3]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  faux
        \IfSubStr[4]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  faux
                                                \exploregroups
                  \IfSubStr{1$2$\a{34}\bc5}{2}{vrai}{faux}  vrai
                 \IfSubStr{1$2$\a{34}\bc5}{34}{vrai}{faux}  vrai
               \IfSubStr{1$2$\a{34}\bc5}{{34}}{vrai}{faux}  vrai
                 \IfSubStr{1$2$\a{34}\bc5}{\b}{vrai}{faux}  faux
                \IfSubStr{1$2$\a{34}\bc5}{\bc}{vrai}{faux}  vrai
               \IfSubStr{1$2$\a{34}\bc5}{\bc5}{vrai}{faux}  vrai
            \IfSubStr{1$2$\a{34}\bc5}{\bc{5}}{vrai}{faux}  faux
        \IfSubStr[1]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
        \IfSubStr[2]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
        \IfSubStr[3]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
        \IfSubStr[4]{\a1{\a1{\a1}\a2}\a3}{\a}{vrai}{faux}  vrai
```

Le test `IfBeginWith`

Les tests doivent donner des résultats identiques ci-dessous puisque `\IfBeginWith` est indifférent au mode d'exploration des groupes !

```
                                                \noexploregroups
              \IfBeginWith{{\a}123\b456}{\a}{vrai}{faux}  faux
            \IfBeginWith{{\a}123\b456}{{\a}}{vrai}{faux}  vrai
               \IfBeginWith{{\a1}\b\c\d}{\a}{vrai}{faux}  faux
                  \IfBeginWith{{1}23456}{12}{vrai}{faux}  faux
                   \IfBeginWith{{1}23456}{1}{vrai}{faux}  faux
                \IfBeginWith{{1}23456}{{1}2}{vrai}{faux}  vrai
                                                \exploregroups
              \IfBeginWith{{\a}123\b456}{\a}{vrai}{faux}  faux
            \IfBeginWith{{\a}123\b456}{{\a}}{vrai}{faux}  vrai
               \IfBeginWith{{\a1}\b\c\d}{\a}{vrai}{faux}  faux
                  \IfBeginWith{{1}23456}{12}{vrai}{faux}  faux
                   \IfBeginWith{{1}23456}{1}{vrai}{faux}  faux
                \IfBeginWith{{1}23456}{{1}2}{vrai}{faux}  vrai
```

Le test `IfEndWith`

Les tests doivent donner des résultats identiques ci-dessous puisque `\IfEndWith` est indifférent au mode d'exploration des groupes !

```
                                                \noexploregroups
```

```
\IfEndWith{\a1\b2{\c3}}{\c3}{vrai}{faux}  faux
\IfEndWith{\a1\b2{\c3}}{{\c3}}{vrai}{faux}  vrai
\IfEndWith{\a1\b2{\c3}}{3}{vrai}{faux}  faux
\IfEndWith{12345{6}}{56}{vrai}{faux}  faux
\IfEndWith{12345{6}}{6}{vrai}{faux}  faux
\IfEndWith{12345{6}}{5{6}}{vrai}{faux}  vrai
                                    \exploregroups
\IfEndWith{\a1\b2{\c3}}{\c3}{vrai}{faux}  faux
\IfEndWith{\a1\b2{\c3}}{{\c3}}{vrai}{faux}  vrai
\IfEndWith{\a1\b2{\c3}}{3}{vrai}{faux}  faux
\IfEndWith{12345{6}}{56}{vrai}{faux}  faux
\IfEndWith{12345{6}}{6}{vrai}{faux}  faux
\IfEndWith{12345{6}}{5{6}}{vrai}{faux}  vrai
```

Le test `IfSubStrBefore`

```
                                    \noexploregroups
\IfSubStrBefore[1,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  vrai
\IfSubStrBefore[2,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  faux
\IfSubStrBefore[2,3]{\a1\a2\a3\b1\b2\b3}{\a}{\b}{vrai}{faux}  vrai
\IfSubStrBefore[1,1]{\a1{\a2\a3\b1}\b2\b3}{2}{\b}{vrai}{faux}  faux
\IfSubStrBefore[1,2]{\a1{\a2\a3\b1}\b2\b3}{3}{\b}{vrai}{faux}  faux
                                    \exploregroups
\IfSubStrBefore[1,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  vrai
\IfSubStrBefore[2,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  faux
\IfSubStrBefore[2,3]{\a1\a2\a3\b1\b2\b3}{\a}{\b}{vrai}{faux}  vrai
\IfSubStrBefore[1,1]{\a1{\a2\a3\b1}\b2\b3}{2}{\b}{vrai}{faux}  vrai
\IfSubStrBefore[1,2]{\a1{\a2\a3\b1}\b2\b3}{3}{\b}{vrai}{faux}  vrai
```

Le test `IfStrBehind`

```
                                    \noexploregroups
\IfSubStrBehind[2,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  vrai
\IfSubStrBehind[3,1]{\a1\a2\a3\b1\b2\b3}{\a}{\b}{vrai}{faux}  faux
\IfSubStrBehind[1,1]{\a1\a2\a3\b1\b2\b3}{\b}{3}{vrai}{faux}  vrai
\IfSubStrBehind[2,1]{\a1{\a2\a3\b1}\b2\b3}{\b}{3}{vrai}{faux}  faux
\IfSubStrBehind[1,1]{\a1{\a2\a3\b1}\b2\b3}{3}{\b}{vrai}{faux}  vrai
                                    \exploregroups
\IfSubStrBehind[2,1]{\a1\a2\a3\b1\b2\b3}{2}{\b}{vrai}{faux}  vrai
\IfSubStrBehind[3,1]{\a1\a2\a3\b1\b2\b3}{\a}{\b}{vrai}{faux}  faux
\IfSubStrBehind[1,1]{\a1\a2\a3\b1\b2\b3}{\b}{3}{vrai}{faux}  vrai
\IfSubStrBehind[2,1]{\a1{\a2\a3\b1}\b2\b3}{\b}{3}{vrai}{faux}  vrai
\IfSubStrBehind[1,1]{\a1{\a2\a3\b1}\b2\b3}{3}{\b}{vrai}{faux}  faux
```

Le test `IfInteger`

Dans les exemples ci-dessous, on examine la différence de comportement de la macro `\IfInteger` selon les modes de développement des arguments.

```
                                    \def\nbA{-12}\def\nbB{498}
                                \def\nbAA{\nbA}\def\nbBB{\nbB}
                                    \fullexpandarg
                                \IfInteger{\nbA}{vrai}{faux}  vrai
                            \IfInteger{\nbA5\nbA}{vrai}{faux}  faux
                            \IfInteger{\nbA6\nbB}{vrai}{faux}  vrai
                        \IfInteger{\nbAA7\nbBB}{vrai}{faux}  vrai
                                    \expandarg
```

```
\IfInteger{\nbA}{vrai}{faux}  vrai
\IfInteger{\nbA5\nbA}{vrai}{faux}  faux
\IfInteger{\nbA6\nbB}{vrai}{faux}  faux
\IfInteger{\nbAA7\nbBB}{vrai}{faux}  faux
                                \noexpandarg
\IfInteger{\nbA}{vrai}{faux}  faux
\IfInteger{\nbA5\nbA}{vrai}{faux}  faux
\IfInteger{\nbA6\nbB}{vrai}{faux}  faux
\IfInteger{\nbAA7\nbBB}{vrai}{faux}  faux
```

Le test `IfDecimal`

Dans les exemples ci-dessous, on examine la différence de comportement de la macro `\IfDecimal` selon les modes de développement des arguments.

```
                        \def\nbA{-12}\def\nbB{498}
                    \def\nbAA{\nbA}\def\nbBB{\nbB}
                                \fullexpandarg
\IfDecimal{\nbA,\nbB}{vrai}{faux}  vrai
\IfDecimal{\nbAA.\nbB}{vrai}{faux}  vrai
\IfDecimal{\nbB,777}{vrai}{faux}  vrai
\IfDecimal{3\nbB,777}{vrai}{faux}  vrai
\IfDecimal{\nbB,\nbB}{vrai}{faux}  vrai
                                \expandarg
\IfDecimal{\nbA,\nbB}{vrai}{faux}  faux
\IfDecimal{\nbAA.\nbB}{vrai}{faux}  faux
\IfDecimal{\nbB,777}{vrai}{faux}  vrai
\IfDecimal{3\nbB,777}{vrai}{faux}  faux
\IfDecimal{\nbB,\nbB}{vrai}{faux}  faux
                                \noexpandarg
\IfDecimal{\nbA,\nbB}{vrai}{faux}  faux
\IfDecimal{\nbAA.\nbB}{vrai}{faux}  faux
\IfDecimal{\nbB,777}{vrai}{faux}  faux
\IfDecimal{3\nbB,777}{vrai}{faux}  faux
\IfDecimal{\nbB,\nbB}{vrai}{faux}  faux
```

La macro `StrBefore`

```
                                \noexploregroups
\StrBefore[2]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  1“a 2
\StrBefore[3]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  1“a 2“a 3–4“a 5–6“a 7″8“a ″9
\StrBefore[4]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBefore[5]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBefore[6]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
                                \exploregroups
\StrBefore[2]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  1“a 2
\StrBefore[3]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  4
```

```
\StrBefore[4]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  6
\StrBefore[5]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  4“a 5–6“a 7″8
\StrBefore[6]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  1“a 2“a 3–4“a 5–6“a 7″8“a ″9
```

La macro `StrBehind`

```
                                              \noexploregroups
\StrBehind[2]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  3–4“a 5–6“a 7″8“a ″9“a 0
\StrBehind[3]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  0
\StrBehind[4]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBehind[5]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBehind[6]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
                                               \exploregroups
\StrBehind[2]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  3–4“a 5–6“a 7″8“a ″9“a 0
\StrBehind[3]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  5–6“a 7″8“a
\StrBehind[4]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  7
\StrBehind[5]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBehind[6]{1\a2\a3{4\a5{6\a7}8\a}9\a0}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  0
```

La macro `StrBetween`

La commande `\StrBetween` opère en mode `\noexploregroups`, quelque soit le mode d'exploration en cours.

```
 \StrBetween[1,3]{\a1\a2{3\a4}5\a6{7\a8}9\a0}{2}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  –3“a 4″5
\StrBetween[2,3]{\a1\a2{3\a4}5\a6{7\a8}9\a0}{\a}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  2–3“a 4″5
 \StrBetween[1,3]{\a1\a2{3\a4}5\a6{7\a8}9\a0}{3}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}
\StrBetween[2,4]{\a1\a2{3\a4}5\a6{7\a8}9\a0}{\a}{\a}[\cmd]
                        \detokenize\expandafter{\cmd}  2–3“a 4″5“a 6–7“a 8″9
```

La macro `StrSubstitute`

```
                                              \noexploregroups
   \StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{\a}{\X}[\cmd]
                        \detokenize\expandafter{\cmd}  “X 1–2“a –3“a ″4“a ″“X 5“X
\StrSubstitute[2]{\a1{2\a{3\a}4\a}\a5\a}{\a}{\X}[\cmd]
                        \detokenize\expandafter{\cmd}  “X 1–2“a –3“a ″4“a ″“X 5“a
     \StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{2}{X}[\cmd]
                        \detokenize\expandafter{\cmd}  “a 1–2“a –3“a ″4“a ″“a 5“a
```

```
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{{3\a}}{XXX}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –3“a ″4“a ″“a 5“a

```
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{3\a}{XXX}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –3“a ″4“a ″“a 5“a

```
\StrSubstitute{a1{b1\bgroup c1}\egroup d1}{1}{X}[\cmd]
\detokenize\expandafter{\cmd}
```
aX–b1“bgroup c1″“egroup dX

```
\exploregroups
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{\a}{\X}[\cmd]
\detokenize\expandafter{\cmd}
```
“X 1–2“X –3“X ″4“X ″“X 5“X

```
\StrSubstitute[2]{\a1{2\a{3\a}4\a}\a5\a}{\a}{\X}[\cmd]
\detokenize\expandafter{\cmd}
```
“X 1–2“X –3“a ″4“a ″“a 5“a

```
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{2}{X}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–X“a –3“a ″4“a ″“a 5“a

```
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{{3\a}}{XXX}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a XXX4“a ″“a 5“a

```
\StrSubstitute{\a1{2\a{3\a}4\a}\a5\a}{3\a}{XXX}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –XXX″4“a ″“a 5“a

```
\StrSubstitute{a1{b1\bgroup c1}\egroup d1}{1}{X}[\cmd]
\detokenize\expandafter{\cmd}
```
aX–bX“bgroup cX″“egroup dX

La macro `StrDel`

```
\noexploregroups
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{\a}[\cmd]
\detokenize\expandafter{\cmd}
```
1–2“a –3“a ″4“a ″5

```
\StrDel[2]{\a1{2\a{3\a}4\a}\a5\a}{\a}[\cmd]
\detokenize\expandafter{\cmd}
```
1–2“a –3“a ″4“a ″5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{2}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –3“a ″4“a ″“a 5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{{3\a}}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –3“a ″4“a ″“a 5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{3\a}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –3“a ″4“a ″“a 5“a

```
\exploregroups
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{\a}[\cmd]
\detokenize\expandafter{\cmd}
```
1–2–3″4″5

```
\StrDel[2]{\a1{2\a{3\a}4\a}\a5\a}{\a}[\cmd]
\detokenize\expandafter{\cmd}
```
1–2–3“a ″4“a ″“a 5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{2}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–“a –3“a ″4“a ″“a 5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{{3\a}}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a 4“a ″“a 5“a

```
\StrDel{\a1{2\a{3\a}4\a}\a5\a}{3\a}[\cmd]
\detokenize\expandafter{\cmd}
```
“a 1–2“a –″4“a ″“a 5“a

La macro `StrLen`

```
\noexploregroups
\StrLen{a1{a2}{\a\b}{a3}a4}
```
7

```
\exploregroups
\StrLen{a1{a2}{\a\b}{a3}a4}
```
10

la macro StrSplit

```
                                                \noexploregroups
                                  \StrSplit{\a{\b{\c\d}\e}\f\g}{2}\xx\yy
\#\detokenize\expandafter{\xx}\#\quad\#\detokenize\expandafter{\yy}\#  #“a –“b –“c “d ″“e ″#  #“f “g #
                                  \StrSplit{\a{\b{\c\d}\e}\f\g}{3}\xx\yy
\#\detokenize\expandafter{\xx}\#\quad\#\detokenize\expandafter{\yy}\#  #“a –“b –“c “d ″“e ″“f #  #“g #
                                                \exploregroups
                                  \StrSplit{\a{\b{\c\d}\e}\f\g}{2}\xx\yy
\#\detokenize\expandafter{\xx}\#\quad\#\detokenize\expandafter{\yy}\#  #“b #  #–“c “d ″“e #
                                  \StrSplit{\a{\b{\c\d}\e}\f\g}{3}\xx\yy
\#\detokenize\expandafter{\xx}\#\quad\#\detokenize\expandafter{\yy}\#  #“c #  #“d #
```

la macro StrMid

La commande \StrMid opère en mode \noexploregroups, quelque soit le mode d'exploration en cours.

```
                                  \StrMid{\a\b{\c\d}\e\f\g\h}{2}{6}[\cmd]
                                            \detokenize\expandafter{\cmd}  “b –“c “d ″“e “f “g
                                  \StrMid{\a\b{\c\d}\e\f\g\h}{3}{4}[\cmd]
                                            \detokenize\expandafter{\cmd}  –“c “d ″“e
```

La macro StrGobbleLeft

```
                                                \noexploregroups
                                  \StrGobbleLeft{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “f
                                                \exploregroups
                                  \StrGobbleLeft{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “d “e
```

La macro StrGobbleRight

```
                                                \noexploregroups
                                 \StrGobbleRight{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “a
                                                \exploregroups
                                 \StrGobbleRight{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “c
```

La macro StrLeft

```
                                                \noexploregroups
                                      \StrLeft{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “a “b –“c “d “e ″
                                                \exploregroups
                                      \StrLeft{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “c
```

La macro StrRight

```
                                                \noexploregroups
                                     \StrRight{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “b –“c “d “e ″“f
                                                \exploregroups
                                     \StrRight{\a\b{\c\d\e}\f}{3}[\cmd]
                                            \detokenize\expandafter{\cmd}  “d “e
```

la macro StrChar

```
                                                \noexploregroups
```

```
\StrChar{\a\b{\c\d\e}\f}{3}[\cmd]
    \detokenize\expandafter{\cmd}  –“c “d “e ″
                                \exploregroups
\StrChar{\a\b{\c\d\e}\f}{3}[\cmd]
    \detokenize\expandafter{\cmd}  “c
```

La macro `StrCount`

```
                                \noexploregroups
\StrCount{\a1{\a2{\a3\a4}\a5}\a6\a7}{\a}  3
 \StrCount{\a1{\a2{\a3\a4}\a5}\a6\a7}{2}  0
                                \exploregroups
\StrCount{\a1{\a2{\a3\a4}\a5}\a6\a7}{\a}  7
 \StrCount{\a1{\a2{\a3\a4}\a5}\a6\a7}{2}  1
```

La macro `StrPosition`

```
                                \noexploregroups
\StrPosition[3]{\a0\a1{\a{2\a3}4}\a5\a6}{\a}  6
\StrPosition[4]{\a0\a1{\a{3\a4}5}\a6\a7}{\a}  8
 \StrPosition[1]{\a0\a1{\a{2\a3}4}\a5\a6}{2}  0
                                \exploregroups
\StrPosition[3]{\a0\a1{\a{2\a3}4}\a5\a6}{\a}  1
\StrPosition[4]{\a0\a1{\a{2\a3}4}\a5\a6}{\a}  2
 \StrPosition[1]{\a0\a1{\a{2\a3}4}\a5\a6}{2}  1
```

La macro `StrCompare`

La commande `\StrCompare` n'est pas affectée par le mode d'exploration.

```
                                \comparenormal
\StrCompare{\a{\b1}\c2}{\a\b1\c2}  2
    \StrCompare{{1\a2}3}{{1\a2}3}  0
      \StrCompare{{1\a2}3}{1\a23}  1
\StrCompare{\a{\b\c}}{\a{\b\c}\d}  0
        \StrCompare{{\a}\b}{\a\b}  1
                                \comparestrict
\StrCompare{\a{\b1}\c2}{\a\b1\c2}  2
    \StrCompare{{1\a2}3}{{1\a2}3}  0
      \StrCompare{{1\a2}3}{1\a23}  1
\StrCompare{\a{\b\c}}{\a{\b\c}\d}  3
        \StrCompare{{\a}\b}{\a\b}  1
```

La macro `StrRemoveBraces`

```
                                \noexploregroups
\StrRemoveBraces{\a1{\b2{\c3{\d4}}}\e5}[\cmd]
    \detokenize\expandafter{\cmd}  “a 1“b 2–“c 3–“d 4″″“e 5
                                \exploregroups
\StrRemoveBraces{\a1{\b2{\c3{\d4}}}\e5}[\cmd]
    \detokenize\expandafter{\cmd}  “a 1“b 2“c 3“d 4“e 5
```