

Ceci est le fichier de test de xstring

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 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} vrai
\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} vrai
\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} vrai
\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} faux
\IfEq{0}{}{vrai}{faux} faux

```

```

\IfEq{++10}{+10}{vrai}{faux} faux
\IfEq{--10}{+10}{vrai}{faux} faux
\IfEq{a}{-}{vrai}{faux} faux
\IfEq{}{a}{vrai}{faux} faux
\IfEq{}{-}{vrai}{faux} vrai

```

La macro StrBefore

```

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

```

Mêmes exemples avec l'argument optionnel :

```

\StrBefore{abcdef}{e}[\aa]\aa abc
\StrBefore{abcdef}{a}[\aa]\aa --
\StrBefore{abcdef}{z}[\aa]\aa --
\StrBefore{a b c d}{c}[\aa]\aa -a b -
\StrBefore{a b c d}{ }[\aa]\aa -a-
\StrBefore[2]{a b c d}{ }[\aa]\aa -a b-
\StrBefore[3]{a b c d}{ }[\aa]\aa -a b c-
\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 aa
\StrBefore[3]{aaaaaa}{aa}[\aa]\aa aaaa
\StrBefore[4]{aaaaaa}{aa}[\aa]\aa --
\StrBefore{a}{}[\aa]\aa --
\StrBefore{}{a}[\aa]\aa --
\StrBefore{}{}[\aa]\aa --

```

La macro StrBehind

```

\StrBehind{abcdef}{e} def
\StrBehind{abcdef}{a} -bcdef-
\StrBehind{abcdef}{z} --
\StrBehind{a b c d}{c} - d-
\StrBehind{a b c d}{ } -b c d-
\StrBehind[2]{a b c d}{ } -c d-
\StrBehind[3]{a b 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{abcdef}{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}{f}[\aa]\aa --
\StrBetween{abcdef}{f}{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}{f}{A} abcdef
\StrSubstitute{abcdef}{f}{} 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}{f}{A}[\aa]\aa abcdef
\StrSubstitute{abcdef}{f}{}[\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

```