

# etextools examples

Examples for some macros provided by the etextools package

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## 1 \expandnext examples

### 1.1 Test if the replacement text of macro is really empty

---

```
\def\xx{ }
```

```
→ \edef \expandnextTest {\string \xx \ is \expandnext \ifempty {\xx }{{not} empty}}
```

```
\expandnextTest= macro:->\xx\ is not empty
```

---

```
\def\xx{}
```

```
→ \edef \expandnextTest {\string \xx \ is \expandnext \ifempty {\xx }{{not} empty}}
```

```
\expandnextTest= macro:->\xx\ is empty
```

---

## 1.2 Test if the replacement text of a macro is blank (empty or spaces)

---

```
\def\xx{something}
```

```
→ \edef \expandnextTest {\string \xx \ is \expandnext \ifblank {\xx }{{not} blank}  
\expandnextTest= macro:->\xx\ is not blank
```

---

```
\def\xx{ }
```

```
→ \edef \expandnextTest {\string \xx \ is \expandnext \ifblank {\xx }{{not} blank}  
\expandnextTest= macro:->\xx\ is blank
```

---

## 1.3 Detokenize the replacement text of a named-sequence

---

```
\def\detokenizecs#1{\expandnext \expandnext \detokenize {\csname #1\endcsname }}
```

```
→ \edef \expandnextTest {\detokenizecs {document}}  
\expandnextTest= macro:->\@latex@error {Can be used only in preamble}\@eha
```

---

## 2 Testing characters

### 2.1 \ifsinglechar versus \iffirstchar

```
→ \edef \ifsinglecharTest {\ifsinglechar *{*hello*}{ single star }{ something else }}  
\ifsinglecharTest= macro:-> something else
```

---

```
→ \edef \ifsinglecharTest {\ifsinglechar *{ *}{ single star }{ something else }}  
\ifsinglecharTest= macro:-> single star
```

---

```
→ \edef \ifsinglecharTest {\ifsinglechar *{ * }{ single star }{ something else }}  
\ifsinglecharTest= macro:-> something else
```

---

Note the space **after** the star ↑.

```
→ \edef \iffirstcharTest {\iffirstchar *{*hello*}{ first char is star }{ something else }}  
\iffirstcharTest= macro:-> first char is star
```

---

### 2.2 Fully Expandable starred macros

---

```
\def\starmacro#1{\FE@ifstar {#1}\starred \notstarred }
```

```
\def\starred#1{your "#1" will be processed by the STAR form}
```

```
\def\notstarred#1{your "#1" will be processed by the NORMAL form}
```

```
→ \edef \FE@ifstarTest {\starmacro {sample text}}
```

```
\FE@ifstarTest= macro:->your "sample text" will be processed by the NORMAL form
```

---

---

→ `\edef \FE@ifstarTest {\starmacro *{sample text}}`  
`\FE@ifstarTest= macro:->your "sample text" will be processed by the STAR form`

---

## 2.3 Fully Expandable macros with options

---

```
\def\optmacro#1{\FE@testopt {#1}\OPTmacro {Mr.}}
```

```
\def\OPTmacro[#1]#2{#1 #2}
```

→ `\edef \FE@testoptTest {\optmacro {Woody Allen}}`  
`\FE@testoptTest= macro:->Mr. Woody Allen`

---

→ `\edef \FE@testoptTest {\optmacro [Ms.]{Vanessa Paradis}}`  
`\FE@testoptTest= macro:->Ms. Vanessa Paradis`

---

## 3 Lists management

### 3.1 \csvloop and \csvloop\* examples

#### 3.1.1 \makequotes

---

```
\def\makequotes#1{"#1"\space }
```

→ `\edef \csvloopTest {\csvloop *[\makequotes ]{hello,world}}`  
`\csvloopTest= macro:->"hello" "world"`

---

#### 3.1.2 \detokenize

---

→ `\edef \csvloopTest {\csvloop *[\detokenize ]{\un ,\deux }}`  
`\csvloopTest= macro:->\un \deux`

---

#### 3.1.3 \numexpr

---

```
\def\mylist{1,2,3,4,5}
```

```
\def\BySeven#1{$#1\times 7 = \number \numexpr #1*7\relax $\par }
```

→ `\edef \csvloopTest {\csvloop [\BySeven ]\mylist }`  
`\csvloopTest= macro:->$1\times 7 = 7$\par $2\times 7 = 14$\par $3\times 7 = 21$\par $4\times 7 = 28$\par $5\times 7 = 35$\par`

---

#### 3.1.4 protected \textbf

---

→ `\protected\edef \csvloopTest {\csvloop *[\textbf ]{hello ,my ,friends}}`  
`\csvloopTest= macro:->\protect \textbf {hello }\protect \textbf {my }\protect \textbf {friends}`

---

### 3.2 `\getlistitem`

---

```
\csvtolist*\mylist{one,two,three,four,five,alpha,beta,gamma}
```

→ `\edef \getlistitemTest {\getlistitem \mylist {4}}`

```
\getlistitemTest= macro:->four
```

---

### 3.3 `\getlistindex` (not expandable)

---

```
\csvtolist*\mylist{one,two,three,four,five,alpha,beta,gamma}
```

→ `\getlistindex{four}\mylist`

```
\indexinlist= macro:->4
```

---