

#### Example 4: syntax pkg, default settings

```
1 % \usepackage{syntax}
2
3 \begin{grammar}
4   <statement> ::= <ident> '=' <expr>
5   \alt 'for' <ident> '=' <expr> 'to' <expr> 'do' <statement>
6   \alt '{' <stat-list> '}'
7   \alt <empty>
8
9   <stat-list> ::= <statement> ';' <stat-list> | <statement>
10 \end{grammar}
```

$\langle \text{statement} \rangle ::= \langle \text{ident} \rangle '=' \langle \text{expr} \rangle$   
| 'for'  $\langle \text{ident} \rangle '=' \langle \text{expr} \rangle$  'to'  $\langle \text{expr} \rangle$  'do'  $\langle \text{statement} \rangle$   
| '{'  $\langle \text{stat-list} \rangle$  '}'  
|  $\langle \text{empty} \rangle$

$\langle \text{stat-list} \rangle ::= \langle \text{statement} \rangle ';' \langle \text{stat-list} \rangle \mid \langle \text{statement} \rangle$

### Example 5: syntax pkg, modified settings

```

1 % \usepackage{syntax}
2
3 \makeatletter
4 \setlength{\grammarparsep}{10pt plus 1pt minus 1pt}
5 \settowidth{\@tempdima}{\textit{<statement>}}
6 \addtolength{\grammarindent}{\@tempdima}
7 \makeatother
8
9 \begin{grammar}
10 <statement> ::= <ident> '=' <expr>
11               \alt `for' <ident> '=' <expr> `to' <expr> `do'
12               ↪ <statement>
13               \alt `{ ' <stat-list> `}'
14               \alt <empty>
15
16 <stat-list> ::= <statement> `;' <stat-list> | <statement>
17 \end{grammar}

```

$\langle \textit{statement} \rangle ::= \langle \textit{ident} \rangle \textit{'='} \langle \textit{expr} \rangle$   
 $\quad \quad \quad | \textit{'for'} \langle \textit{ident} \rangle \textit{'='} \langle \textit{expr} \rangle \textit{'to'} \langle \textit{expr} \rangle \textit{'do'} \langle \textit{statement} \rangle$   
 $\quad \quad \quad | \textit{'{' } \langle \textit{stat-list} \rangle \textit{'}'}$   
 $\quad \quad \quad | \langle \textit{empty} \rangle$

$\langle \textit{stat-list} \rangle ::= \langle \textit{statement} \rangle \textit{';' } \langle \textit{stat-list} \rangle | \langle \textit{statement} \rangle$