

# autopuncitems

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## 1 Introduction

This package provides environments `AutoPuncItemize`, `AutoPuncItemizeO`, and `AutoPuncItemizeE` (beta) to automatically punctuate the items. By default, it adds the `autopunc (O|E)` options in the `enumitem` environments `itemize`, `enumerate`, and `description`, to wrap the contents in these environments. If you want to skip this (say if you were using the beamer class which may be interfered with by `enum item`), pass the `noenumitem` option to this package. You can still use the environments with beamer, though. It uses lua pattern matching to modify the environment's contents.

## 2 Some commands

`\APomit` Used in an `\item` to signify that that item should not be automatically punctuated, and not be counted. Expands to nothing.

`\APpass` Used in an `\item` to signify that that item should not be automatically punctuated, and but still counted. Expands to nothing.

`\setAPEach {}{}{}` Set the default, second last, and last punctuation point in that order.

`\setAPall {}` Set all punctuation points the same.

`\setAPdef {}` Set the default punctuation point. `;` by default.

`\setAPseclast {}` Set the second last punctuation point. `;` and by default.

`\setAPlast {}` Set the second last punctuation point. `.` by default.

`\enableAPautopassnest` Automatically put an `\APpass` on items that introduce a nested list. Default behaviour.

`\disableAPautopassnest` Do not automatically put an `\APpass` on items that introduce a nested list.

### 3 Variants

- `autopunc` Does not expand the contents of environment. Tutorial on next section shows this.
- `autopuncO` Expands the contents of environment once. Useful if `\item` 's are in a command
- `autopuncE` Fully expands the contents of environment first. This is in-progress and should not be used.

## 4 Tutorial

### 4.1 Basic Use

```
1 \begin{itemize}[autopunc]
2   \item one
3   \item two
4   \item three
5   \item four
6 \end{itemize}
```

- one;
- two;
- three; and
- four.

### 4.2 Demonstrating Pass

```
1 \begin{itemize}[autopunc]
2   \item one
3   \item two
4   \item three \APpass
5   \item four
6 \end{itemize}
```

- one;
- two;
- three
- four.

```
1 \begin{itemize}[autopunc]
2   \item one
3   \item two
4   \item three \APpass
5   \item four \APpass
6 \end{itemize}
```

- one;
- two;
- three
- four

### 4.3 Demonstrating Omit

```
1 \begin{itemize}[autopunc]
2   \item one
3   \item two
4   \item three \APomit
5   \item four
6 \end{itemize}
```

- one;
- two; and
- three
- four.

1	<code>\begin{itemize}[autopunc]</code>	
2	<code>\item one</code>	• one; and
3	<code>\item two</code>	• two.
4	<code>\item three \APomit</code>	• three
5	<code>\item four \APomit</code>	• four
6	<code>\end{itemize}</code>	

## 4.4 Nested

You must use `autopunc` on each nested list if you want that sub-list to be automatically punctuated. Note that by default, the item introducing (before) a sub-list will not be automatically punctuated.

1	<code>\begin{itemize}[autopunc]</code>	
2	<code>\item one</code>	
3	<code>\item two</code>	• one;
4	<code>\item three:</code>	• two;
5	<code>\begin{enumerate}[autopunc]</code>	• three:
6	<code>\item alpha:</code>	1. alpha:
7	<code>\begin{description}[autopunc]</code>	<b>hello</b> world.
8	<code>\item[hello] world</code>	2. beta; and
9	<code>\end{description}</code>	3. delta.
10	<code>\item beta</code>	
11	<code>\item delta</code>	• four.
12	<code>\end{enumerate}</code>	
13	<code>\item four</code>	
14	<code>\end{itemize}</code>	

### 4.4.1 If you forget to use `\APpass`

If you disable auto-pass nested lists, and don't use `\APpass`, here is what happens. Notice the extra “; and” below `hello world` and `beta`.

1	<code>\disableAPautopassnest</code>	
2	<code>\begin{itemize}[autopunc]</code>	
3	<code>\item one</code>	• one;
4	<code>\item two</code>	• two;
5	<code>\item three</code>	• three
6	<code>\begin{enumerate}[autopunc]</code>	1. alpha
7	<code>\item alpha</code>	<b>hello</b> world.
8	<code>\begin{description}[autopunc]</code>	; and
9	<code>\item[hello] world</code>	2. beta.
10	<code>\end{description}</code>	; and
11	<code>\item beta</code>	• four.
12	<code>\end{enumerate}</code>	
13	<code>\item four</code>	
14	<code>\end{itemize}</code>	

```

1 \enableAPautopassnest
2 \begin{itemize}[autopunc]
3   \item one
4   \item two
5   \item three
6   \begin{enumerate}
7     \item alpha
8     \begin{description}[autopunc]
9       \item[hello] world
10    \end{description}
11    \item beta
12  \end{enumerate}
13  \item four
14 \end{itemize}

```

- one;
- two;
- three
  1. alpha  
**hello** world.
  2. beta
- four.

You may want to use the `AutoPuncItems` environment outside a list environment instead, say perhaps if you're using the `beamer`. Note that nested lists are normally not punctuated, and since the first-level list is inside the environment, it's considered nested. If you would like to disable the prevention of auto-punctuating all nested lists, use the `\disableAPprotectnest`. Note that nested lists will cause an error to occur.

```

1 \disableAPprotectnest
2 \begin{AutoPuncItems}
3 \begin{itemize}
4   \item one
5   \item two
6   \item three
7   \item four
8 \end{itemize}
9 \end{AutoPuncItems}

```

- one;
- two;
- three; and
- four

The normal way to use the environment should be inside the first list, like so.

```

1 \enableAPautopassnest % default settn
2 \begin{itemize}
3 \begin{AutoPuncItems}
4   \item one
5   \item two
6   \item three
7   \item four
8 \end{AutoPuncItems}
9 \end{itemize}

```

- one;
- two;
- three; and
- four.