

Management of lists (types `list_T` and `listitem_T` from vim) was changed in <https://github.com/neovim/neovim/pull/7708/>. There is a lint against the “old” usage, but here is a list (pun not intended) of the most important changes.

Declarations for the table

- `list_T list`: a list
- `listitem_T li`: an item of `list`
- `int val` a value for `lv_copyID`

Old	New	Comment
<code>list-&gt;lv_first</code>	<code>tv_list_first(list)</code>	
<code>list-&gt;lv_last</code>	<code>tv_list_last(list)</code>	
<code>li-&gt;li_next</code>	<code>TV_LIST_ITEM_NEXT(list, li)</code>	TV_LIST_ITEM_NEXT avoided if possible, must use list which li belongs to.
<code>li-&gt;li_prev</code>	<code>TV_LIST_ITEM_PREV(list, li)</code>	TV_LIST_ITEM_PREV avoided if possible, must use list which li belongs to.
	Suggestion by @ZyX-l:	Use <code>TV_LIST_ITER</code> or indexing instead of the previous two calls.
<code>list-&gt;lv_len</code>	<code>tv_list_len(list)</code>	
<code>list-&gt;lv_lock</code>	<code>tv_list_locked(list)</code>	
<code>&amp;li-&gt;li_tv</code>	<code>TV_LIST_ITEM_TV(li)</code>	
<code>list-&gt;lv_refcount++</code>	<code>tv_list_ref(list)</code>	
<code>val = list-&gt;lv_copyID</code>	<code>val = tv_list_copyid(list)</code>	
<code>list-&gt;lv_copyID = val</code>	<code>tv_list_set_copyid(list, val)</code>	

Old	New	Comment
<pre>for (li = list-&gt;lv_first; li != NULL &amp;&amp; another_cond; li = li-&gt;li_next) code</pre>	<pre>TV_LIST_ITER_CONST *li, { if (another_cond) {break;} code}}</pre>	<pre>if list, TV_LIST_ITER(...) if you need to modify list items (note: assigning copyID is also modification and this happens always when recursively traversing a list).</pre>

For more details and some more advanced usage, the doxygen documentation on `typval.h` and `typval.c`.