CoCoA-5 - Feature #1541

foreach with ref to list entry?

01 Dec 2020 13:58 - John Abbott

Status:	New		Start date:	01 Dec 2020
Priority:	Normal		Due date:	
Assignee:			% Done:	0%
Category:	CoCoA-5 function: new		Estimated time:	0.00 hour
Target version:	CoCoA-5.4.2		Spent time:	0.40 hour

Description

Julian Danner asks whether it would be possible to have a version of foreach which operates on a reference to the list entry.

Currently this does not change L

```
L := [1,2,3];
foreach X in L do
  if X > 2 then X := 0; endif;
endforeach;
```

The actual implementation was a list of RECORDs where it made sense to update a field of some of the records.

History

#1 - 01 Dec 2020 14:03 - John Abbott

If we choose to extend CoCoA-5, there are 2 obvious approaches:

- modify foreach so that it uses references --- obviously not backward compatible!
- make a new loop command (*e.g.* foreachref) --- obviously entails modifying the interpreter significantly

At the moment I am undecided whether the proposal is a good idea. The man page for foreach should make it clear that entries in the original list cannot be modified by changing the value of the loop variable. I have made a first, simple change to the man page.

#2 - 15 Jan 2024 19:39 - John Abbott

Postponing this issue because it requires discussion, and could be tricky/lengthy if we opt to to make the change.
I have made a further minor improvement to the documentation for foreach.