

CoCoALib - Design #1059

Printing ring for ideals (or just for ideals 0 and 1)

05 May 2017 14:31 - Anna Maria Bigatti

Status:	New	Start date:	05 May 2017
Priority:	Normal	Due date:	
Assignee:		% Done:	10%
Category:	Improving	Estimated time:	3.00 hours
Target version:	CoCoALib-1.0	Spent time:	0.40 hour
Description			
Printing out an ideal gives no indication of the ring: <code>ideal(...)</code> . For matrices we now write <code>matrix(* ring description */ [...])</code> In particular I find that <code>ideal()</code> , <code>ideal(0)</code> and <code>ideal(1)</code> are a bit misleading and seem independent of a ring. I suggest adding the ring as for the matrix in these three cases. I don't think it is important to do this for <code>ideal(0,1,1,1,0,0,1)</code> (perverse?)			

History

#1 - 05 May 2017 16:00 - John Abbott

I am not (yet?) convinced that this is the right thing to do, partly because I think it could easily make it (even) harder to comprehend the printed form of the ideal.

You can always find out to which ring the ideal belongs by computing `RingOf(I)`.

ADDENDUM why only for ideals 0 and 1? If I have several rings containing x then I do not know to which ring `ideal(x)` belongs...

#2 - 05 May 2017 16:58 - Anna Maria Bigatti

- Subject changed from *Printing ideals 0 and 1* to *Printing ring for ideals (or just for ideals 0 and 1)*

- % Done changed from 0 to 10

Maybe we could add the ring anyway when we do `indent(I)`

JAA simultaneously wrote the following:

Anna suggested adapting `indent` so that it does print out the ring, but leaving normal printing without giving the ring explicitly.

I wonder how often it happens that someone creates an ideal without knowing to which ring it belongs; an example of this could be `GroebnerFanIdeals`.