

CoCoA-5 - Slug #1638

MinSubsetOfGens sometimes very slow

06 Dec 2021 20:35 - John Abbott

Status:	New	Start date:	06 Dec 2021
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	enhancing/improving	Estimated time:	0.00 hour
Target version:	CoCoA-5.4.2	Spent time:	0.20 hour
Description			
I have just tried MinSubsetOfGens, and was surprised how slow it was on a small example.			
<pre>use QQ[x,y,z]; L := [5*x*z^3 -3*z^4 +4*z -1, -4*x^3*z +4*y*z^3 -2*y^3 -x*z]; RGB := ReducedGBasis(ideal(L)); --> contains 8 elems I := ideal(RGB); MinSubsetOfGens(I); -- 1000+seconds</pre>			
Related issues:			
Related to CoCoA-5 - Bug #1640: MinSubsetOfGens does not find min subset		Closed	08 Dec 2021

History

#1 - 06 Dec 2021 20:37 - John Abbott

There are only 256 subsets to try; and some can be quickly eliminated.

I saw the source, and understand that it is not designed to be fast... but I had not expected it to be so slow!

Maybe some simpler "slug" examples will surface.

#2 - 10 Dec 2021 15:16 - John Abbott

- Related to Bug #1640: MinSubsetOfGens does not find min subset added