

CoCoALib - Feature #1780

radical for ideals in SparsePolyRing: code in C++

06 Feb 2024 09:01 - Anna Maria Bigatti

Status:	Closed	Start date:	06 Feb 2024
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	New Function	Estimated time:	0.00 hour
Target version:	CoCoALib-0.99850	Spent time:	2.70 hours
Description			
Port the code from the CoCoA-5 package radical.cpkg5 into CoCoALib			
Related issues:			
Related to CoCoALib - Bug #1779: Radical error with lex (again)		Closed	05 Feb 2024
Related to CoCoA-5 - Bug #1567: Radical in non-zero char		Closed	21 Jan 2021
Related to CoCoA-5 - Bug #1577: radical: lex order, ERROR: Ring is not stand...		Closed	15 Feb 2021
Related to CoCoALib - Slug #1646: radical: could be more clever		Closed	17 Jan 2022
Related to CoCoALib - Feature #1417: RadicalZeroDim with extra parameter for ...		In Progress	14 Feb 2020
Related to CoCoA-5 - Slug #1390: CoCoA-5 test: radical too slow		Closed	09 Jan 2020
Related to CoCoALib - Support #1782: Make CoCoALib test file for radical		New	23 Feb 2024
Related to CoCoALib - Design #1378: Create two separate radical fns (for 0-di...		New	20 Dec 2019

History

#1 - 06 Feb 2024 09:02 - Anna Maria Bigatti

- Related to Bug #1779: Radical error with lex (again) added

#2 - 06 Feb 2024 09:02 - Anna Maria Bigatti

- Related to Bug #1567: Radical in non-zero char added

#3 - 06 Feb 2024 09:02 - Anna Maria Bigatti

- Related to Bug #1577: radical: lex order, ERROR: Ring is not standard graded added

#4 - 06 Feb 2024 09:03 - Anna Maria Bigatti

- Related to Slug #1646: radical: could be more clever added

#5 - 06 Feb 2024 09:03 - Anna Maria Bigatti

- Related to Feature #1417: RadicalZeroDim with extra parameter for GBasis timeout added

#6 - 06 Feb 2024 09:10 - Anna Maria Bigatti

- % Done changed from 0 to 50

The package was first translated by Alice Moallemy, then fixed by Nicolas Jagersma (2023). Now it's been officially included in CoCoALib by me (2024), but it needs polishing.

Apart from the few bugs reappearing, there is the question of the lamRadical3Flag which I need to think about. It should all go through myTestIsRadical, ... and now it isn't (I had forced the function radical, instead)

#7 - 06 Feb 2024 10:17 - Anna Maria Bigatti

Anna Maria Bigatti wrote:

It should all go through myTestIsRadical, ... and now it isn't (I had forced the function radical, instead)

I messed things up. What I actually was thinking is that the radical is, well, radical! So it should have the flag set, AS IN myTestIsRadical.

#8 - 06 Feb 2024 11:44 - Anna Maria Bigatti

- Related to Slug #1390: CoCoA-5 test: radical too slow added

#9 - 06 Feb 2024 11:51 - Anna Maria Bigatti

Now the test from [#1390](#) is fast (in C++), so I re-activated it.

#10 - 23 Feb 2024 11:40 - Anna Maria Bigatti

- Related to Support #1782: Make CoCoALib test file for radical added

#11 - 22 Mar 2024 09:13 - John Abbott

- Related to Design #1378: Create two separate radical fns (for 0-dim ideals) added

#12 - 22 Mar 2024 09:13 - Anna Maria Bigatti

- Status changed from New to Closed

- % Done changed from 50 to 100

The old CoCoA-5 radical code is currently still available as function radical_COCOALANGUAGE in the radical.cpkg5 package