CoCoALib - Feature #914

New function: quorem for univariate polynomials?

16 Aug 2016 19:29 - Anna Maria Bigatti

Status:	New	Start date:	16 Aug 2016	
Priority:	Normal	Due date:		
Assignee:		% Done:	0%	
Category:	New Function	Estimated time:	0.00 hour	
Target version:	CoCoALib-1.0	Spent time:	0.75 hour	
Description				
(requested by Christoph Fuerst)				
I've seen at the examples that there are routines available				
IsDivisible operator/				
but no modulo operation. Is it planned, for a future release, to provide a division with quotient and remainder for univariate polynomials? Or can you suggest me a workaround?				
Related issues:				
Related to CoCoALib - Design #1720: DivAlg in CoCoALib			New	21 Dec 2022

History

#1 - 16 Aug 2016 19:32 - Anna Maria Bigatti

There is a function which is not publicly available: DivMod in DenseUPolyRing.C. Should we make that function available? and with which name? Or suggest something else?

#2 - 22 Aug 2016 16:45 - John Abbott

The request for quorem (or whatever it will be called) seems reasonable to me -- at first sight, anyway.

If the coeff ring is a field then there should be no problem. If it is not a field then it is not so clear what the definition of quorem should be: always error? error if LCs are not divisible? never error, just return a quot and a rem?

#3 - 21 Dec 2022 18:28 - Anna Maria Bigatti

- Related to Design #1720: DivAlg in CoCoALib added