CoCoALib - Design #513

Quick/correct flag for bool3 fns

02 Apr 2014 17:18 - John Abbott

Status: In Progress Start date: 02 Apr 2014

Priority: High Due date:

Assignee: % Done: 10%

Category:New FunctionEstimated time:20.00 hoursTarget version:CoCoALib-1.0Spent time:0.10 hour

Description

Idea: all (or most) fns which return bool3 values should accept a flag (bool?) saying whether to be "quick" or "correct".

This idea arose when trying to implement lamIntegralDomain3 for a QuotientRing; the best impl would simply have been return IsPrime3(myDefiningIdeal,QuickModeFlag). This would allow IsPrime3 to be "clever" in some cases...

Is this a good idea?

What type should the quick-or-correct flag be? A plain bool or from a 2-element enum? Or maybe an enum with more than 2 elements *e.g.* which would permit the use of "quick" heuristics to give a "reliable" result (*e.g.* IsProbPrime instead of IsPrime)?

Related issues:

Related to CoCoALib - Design #498: IsIntegralDomain, lamIntegralDomain3	Closed	28 Mar 2014	
Related to CoCoALib - Feature #361: implement IsPrime3, IsMaximal3	Closed	29 May 2013	
Related to CoCoALib - Design #871: Redesign ideals	New	26 Apr 2016	
Related to CoCoALib - Feature #899: IsMaximal, IsPrimary for IDEAL (in cocoa	Closed	27 Jun 2016	
Related to CoCoALib - Design #924: FlagManager for bool/bool3 flags	New	19 Sep 2016	

History

#1 - 15 Apr 2014 15:47 - John Abbott

- Status changed from New to In Progress
- Priority changed from Normal to High
- % Done changed from 0 to 10
- Estimated time set to 20.00 h

We should start by looking at the various current uses of bool3, and possibly any obvious future candidates.

#2 - 10 Jul 2014 16:30 - John Abbott

- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-1.0

#3 - 26 Apr 2016 15:10 - John Abbott

- Related to Design #871: Redesign ideals added

#4 - 08 Sep 2016 11:21 - Anna Maria Bigatti

- Related to Feature #899: IsMaximal, IsPrimary for IDEAL (in cocoalib) added

#5 - 19 Sep 2016 07:49 - Anna Maria Bigatti

- Related to Design #924: FlagManager for bool/bool3 flags added

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