CoCoALib - Bug #935

ElimMat, ElimHomogMat: complain about zero or negative weights

03 Oct 2016 17:28 - John Abbott

Status:	Closed	**Start date:**	03 Oct 2016
Priority:	High	**Due date:**	
Assignee:	Anna Maria Bigatti	**% Done:**	100%
Category:	Safety	**Estimated time:**	0.99 hour
Target version:	CoCoALib-0.99700	**Spent time:**	0.95 hour

Description

The fns ElimMat and ElimHomogMat should give error if the user supplies weights are not strictly positive (integers?)

History

#1 - 03 Oct 2016 17:29 - John Abbott

It seems that the weights must be integer. This should be documented!

#2 - 08 Nov 2017 16:52 - John Abbott

- Target version changed from CoCoALib-0.99560 to CoCoALib-0.99600

#3 - 14 Jun 2018 16:16 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

What is the status of this issue?

What do we allow as "grading matrices"?
Current code requires entries to be integer (but allows matrix over **QQ** or *any ring of char 0*?!?)
Should a grading mat with 0 rows be allowed? If so, where?

#4 - 14 Jun 2018 17:28 - John Abbott

- Status changed from In Progress to Feedback

- % Done changed from 10 to 90

Anna says that ElimMat should allow a grading mat with 0 rows, but ElimHomogMat should not.
I have adjusted the code accordingly.

#5 - 06 Aug 2018 16:12 - Anna Maria Bigatti

- Target version changed from CoCoALib-0.99600 to CoCoALib-0.99650 November 2019

Decide what we really want for these two functions.
They are mostly OK.

#6 - 03 Oct 2019 17:08 - Anna Maria Bigatti

- Assignee set to Anna Maria Bigatti

- Target version changed from CoCoALib-0.99650 November 2019 to CoCoALib-0.99700

Now I cannot remember WHY they should complain....
postpone to next version

#7 - 13 Feb 2020 10:30 - John Abbott

- Subject changed from ElimMat, ELimHomogMat: complain about zero or negative weights to ElimMat, ElimHomogMat: complain about zero or negative weights

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

- Estimated time set to 0.99 h

The code calls IsNonNegGrading (see MatrixForOrdering.C around lines 959 and 973).
I presume IsNonNegGrading does a sane check.