CoCoALib - Support #1761

MakeTermOrdMat: improve error mesg

06 Aug 2023 11:25 - John Abbott

Status:	Closed		Start date:	06 Aug 2023
Priority:	Normal		Due date:	
Assignee:	John Abbott		% Done:	100%
Category:	Improving		Estimated time:	0.99 hour
Target version:	CoCoALib-0.99850		Spent time:	0.95 hour

Description

The fn MakeTermOrdMat should give a better error mesg if the input matrix is not non-negative:

```
/**/ W := RowMat([1,0,-1,1]);
/**/ MakeTermOrdMat(W);
--> ERROR: Ordering must be a term-ordering (i.e. all indets>1)
--> [CoCoALib] MakeTermOrdMat
--> /**/ MakeTermOrdMat(W);
-->      ^^^^^^^^^^^^^^^^
```

Related issues:			
Related to CoCoALib - Bug #1789: GradingMat with negative weights should com...		**Closed**	**12 Mar 2024**

History

#1 - 06 Aug 2023 11:27 - John Abbott

Source code is in MatrixForOrdering.C
I do wonder if the call to MakeNonNeg is safe: why is the loop on line 133 safe (couldn't PosRow go out of bounds?)

UPDATE the problem with PosRow possibly going out of bounds has been "resolved" by adding a comment that it is **assumed** that there are no zero cols

#2 - 03 Oct 2023 14:36 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

Now the behaviour is as follows:

```
/**/ W := RowMat([1,0,-1,1]);
/**/ MakeTermOrdMat(W);
--> ERROR: Topmost non-zero entry in each col must be positive
--> [CoCoALib] MakeTermOrdMat
--> /**/ MakeTermOrdMat(W);
-->      ^^^^^^^^^^^^^^^^
```

Is this Good enough?

#3 - 22 Jan 2024 10:26 - John Abbott

- Subject changed from MakTermOrdMat: improve error mesg to MakeTermOrdMat: improve error mesg

#4 - 22 Jan 2024 10:28 - Anna Maria Bigatti

- Status changed from In Progress to Feedback

- % Done changed from 10 to 60

#5 - 13 Mar 2024 20:47 - John Abbott

- Related to Bug #1789: GradingMat with negative weights should complain (or deal with them properly!!) added

#6 - 13 Mar 2024 21:16 - John Abbott

- Status changed from Feedback to Closed

- Assignee set to John Abbott

- % Done changed from 60 to 100

- Estimated time set to 0.99 h