CoCoALib - Bug #1082

factor in ZZ[x] gives errors

21 Jun 2017 21:32 - John Abbott

Status:	Closed		**Start date:**	21 Jun 2017
Priority:	High		**Due date:**	
Assignee:	John Abbott		**% Done:**	100%
Category:	Maths Bugs		**Estimated time:**	0.90 hour
Target version:	CoCoALib-0.99560		**Spent time:**	1.20 hour

Description
factorizing in ZZ[x] gives errors.
Rectify.

History

#1 - 21 Jun 2017 21:33 - John Abbott

- Status changed from New to In Progress

- Assignee set to John Abbott

- % Done changed from 0 to 10

The problem is content handling. See around line 282 in factor.C

#2 - 22 Jun 2017 13:13 - John Abbott

- Status changed from In Progress to Feedback

- % Done changed from 10 to 90

- Estimated time set to 0.90 h

The old factorizer (in C) actually factorizes over ZZ, so the only fix needed was the handling of the content.

I improved test-factor1.C so that its tests factorization over both QQ and ZZ; also the test example now has non-trivial coeffs, and non-trivial content.

#3 - 22 Jun 2017 13:15 - John Abbott

A quick check suggests that factorization over ZZ is actually slower than factorization over QQ. This is counter-intuitive, but probably not worth fixing... it should be resolved if the factorizer is ever rewritten in C++.

#4 - 08 Nov 2017 14:12 - John Abbott

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

Why didn't I give at least one failing example?
Anyway, it seems OK now... so closing.