

## CoCoA-5 - Bug #981

### SqFreeFactor: small (or big) bug?

25 Nov 2016 16:22 - Anna Maria Bigatti

<b>Status:</b>	Closed	<b>Start date:</b>	25 Nov 2016
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Abbott	<b>% Done:</b>	100%
<b>Category:</b>	Incomplete function	<b>Estimated time:</b>	0.75 hour
<b>Target version:</b>	CoCoA-5.2.2	<b>Spent time:</b>	0.55 hour
<b>Description</b>			
This example gives error (others seem to work fine)			
<pre>Fp ::= ZZ/(32003); Use Fpt ::= Fp[t]; factor(t^3+t-5); --&gt; irreducible K := Fpt/ideal(t^3+t-5); K; Use K[x];  F := x^2 + (t^2)*x + (-1); SqFreeFactor(F); --&gt; ERROR: Unable to convert value --&gt; SqFreeFactor(F); --&gt; ^^^^^^^^^^^^^^^^^^^</pre>			

#### History

##### #1 - 25 Nov 2016 16:46 - John Abbott

- Status changed from New to Resolved
- Assignee set to John Abbott
- % Done changed from 0 to 80
- Estimated time set to 0.33 h

I have modified SparsePolyRingBase::myGCD to handle specially only if coeffs are IsRingFp; previously it just tested for small positive characteristic (without checking that it is a prime field).

Checked in; should be OK now.

##### #2 - 25 Nov 2016 16:59 - John Abbott

- Estimated time changed from 0.33 h to 0.75 h

Added Anna's example to CoCoA-5 tests/exbugs.cocoa5. Checked in.

##### #3 - 25 Nov 2016 17:28 - Anna Maria Bigatti

Works on other examples (used in factorization over algebraic extensions).  
Thanks! great!

##### #4 - 13 Nov 2017 15:57 - John Abbott

- Status changed from Resolved to Closed
- % Done changed from 80 to 100