CoCoALib - Feature #62

polynomial coefficient extraction w.r.t. single variable -- dense output

13 Dec 2011 15:31 - John Abbott

Status:	Closed	**Start date:**	13 Dec 2011
Priority:	Normal	**Due date:**	
Assignee:	John Abbott	**% Done:**	100%
Category:	New Function	**Estimated time:**	0.00 hour
Target version:	CoCoALib-0.99534 Seoul14	**Spent time:**	0.25 hour

Description

Given a polynomial f and an indet x, produce a vector of the coeffs of f when viewed as a poly in x. The resulting vector v must satisfy f = \sum_i v[i]*x^i and each entry v[i] is of degree 0 in x.

The zero polynomial will produce an empty vector.

If f is multivariate the vector entries must be in RingOf(f).
If f is univariate the vector entries **could** be in CoeffRing(RingOf(f)) -- but this would be incompatible with the multivariate version.
Perhaps the fns should have different names?

Related issues:

Related to CoCoALib - Feature #51: polynomial coefficient extraction w.r.t. v...	**Closed**	
Related to CoCoALib - Feature #278: add CoeffVecWRT to cocoalib	**Closed**	**28 Nov 2012**

History

#1 - 26 Apr 2012 16:21 - Anna Maria Bigatti

- Parent task deleted (#51)

#2 - 01 Aug 2014 08:59 - Anna Maria Bigatti

- Target version set to CoCoALib-1.0

#3 - 01 Aug 2014 16:25 - John Abbott

- Category set to New Function

- Status changed from New to Closed

- Assignee set to John Abbott

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

- % Done changed from 0 to 100

This has already been done: it is the function **CoeffVecWRT**.
Closing.