

## CoCoALib - Feature #354

### New function BinRepr (was BinExp, also known as Macaulay representation)

23 May 2013 08:32 - Anna Maria Bigatti

<b>Status:</b>	Closed	<b>Start date:</b>	23 May 2013
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Abbott	<b>% Done:</b>	100%
<b>Category:</b>	New Function	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	CoCoALib-0.9953	<b>Spent time:</b>	10.25 hours
<b>Description</b>			
port the binomial representation into CoCoALib, and then to CoCoA-5. It was called "BinExp" in CoCoA-4, but Exp reminds "exponent".			
<b>Related issues:</b>			
Related to CoCoA-5 - Design #474: Eliminate package BinRepr			<b>In Progress</b> 14 Mar 2014

#### History

##### #1 - 23 May 2013 08:40 - Anna Maria Bigatti

- Subject changed from *New function BinRepr (also known as Macaulay representation)* to *New function BinRepr (was BinExp, also known as Macaulay representation)*

##### #2 - 23 May 2013 12:32 - John Abbott

- Status changed from *In Progress* to *Feedback*

- % Done changed from 0 to 90

I have implemented **BinomialRepr** and **BinomialReprShift** in CoCoALib, and made them accessible from CoCoA-5. The documentation has been updated.

The impl is a compromise between simplicity and speed; anyway, noticeably faster than CoCoA-4 for larger inputs.

Note: we have decided to declare EvalBinExp obsolete because the new function BinomialReprShift is fast enough.

##### #3 - 29 May 2013 16:41 - John Abbott

- Status changed from *Feedback* to *Closed*

- % Done changed from 90 to 100

I'm closing this even though strictly speaking there are no tests for BinomialRepr.