CoCoA-5 - Design #294

BuiltInFunctions: General "OneLiner" for arguments of different type

23 Jan 2013 12:51 - Anna Maria Bigatti

Status:	Closed	**Start date:**	23 Jan 2013
Priority:	Normal	**Due date:**	
Assignee:	Anna Maria Bigatti	**% Done:**	100%
Category:	Parser/Interpreter	**Estimated time:**	2.00 hours
Target version:	CoCoA-5.1.1 Seoul14	**Spent time:**	1.75 hour

Description

one liner functions work like a dream (thanks Giovanni! ;-)
Is it possible to simplify writing the code for *overloaded* functions?
E.g.
IsZero(RINGELEM/INT/RAT/...)

2014-08 conclusion: using switch with improved function names and behaviour (documented)

Related issues:

Related to CoCoA-5 - Feature #306: Function for accessing the pointed value	**Closed**	**12 Feb 2013**
Related to CoCoA-5 - Bug #524: BuiltInFunctions: remove calls to WrongTypeExc...	**Closed**	**08 Apr 2014**
Related to CoCoA-5 - Feature #317: BuiltInFunctions: evalArgAsLong	**Closed**	**20 Feb 2013**
Related to CoCoA-5 - Design #525: BuiltInFunctions: evalArgAsT1OrT2, evalArgA...	**Closed**	**08 Apr 2014**
Is duplicate of CoCoA-5 - Feature #284: BuiltInFunctions: more flexible typin...	**Closed**	**05 Dec 2012**

History

#1 - 24 Jan 2013 08:28 - Anna Maria Bigatti

Not quite the dream solution, but I found this function making life easier:
evalArgAsT1orT2orT3

```
int which;
intrusive_ptr<RightValue> v = runtimeEnv->evalArgAsT1orT2orT3<BigIntValue, BigRatValue, RingElemValue>(ARG(0),
 which);
....
```

#2 - 12 Feb 2013 11:57 - Anna Maria Bigatti

added also **evalArgAsT1orT2orT3orT4** and **evalArgAsT1orT2orT3orT4orT5**

#3 - 28 Mar 2014 09:07 - Anna Maria Bigatti

- Subject changed from General "OneLiner" for arguments of different type to BuiltInFunctions: General "OneLiner" for arguments of different type

#4 - 08 Apr 2014 08:25 - Anna Maria Bigatti

- Status changed from New to Closed

#5 - 08 Apr 2014 08:27 - Anna Maria Bigatti

- Status changed from Closed to In Progress

- Target version changed from CoCoA-5.1.0 Easter14 to CoCoA-5.1.1 Seoul14

#6 - 31 Jul 2014 15:08 - Anna Maria Bigatti

- Status changed from In Progress to Resolved

- % Done changed from 0 to 70

- Estimated time set to 2.00 h

Is the new approach in BuiltInFunctions good enough?
I think so: it is not a one-liner but it's very readable (look for EvalArgAsT1Or..)

Close this issue?

#7 - 05 Sep 2014 11:51 - Anna Maria Bigatti

- Status changed from Resolved to Closed

- Assignee set to Anna Maria Bigatti

- % Done changed from 70 to 100

Documented in
http://cocoa.dima.unige.it/cocoalib/doc/html/BuiltInFunctions.html
and in ICMS slides
https://www.researchgate.net/publication/262797206_Integration_of_libnormaliz_in_CoCoALib_and_CoCoA_5