

CoCoA-5 - Bug #108

Unhandled division by zero in FFp

19 Mar 2012 14:36 - John Abbott

Status:	Closed	Start date:	19 Mar 2012
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	100%
Category:	Parser/Interpreter	Estimated time:	2.00 hours
Target version:	CoCoA-5.0.2	Spent time:	2.00 hours
Description			
Here's a sample case			
<pre>Use ZZ/(7) [x]; f:=2+x-x; f/7; --> ERROR: Division by zero or by a zero-divisor (1/7)*f; --> NASTY ERROR!!</pre>			

History

#1 - 19 Mar 2012 17:14 - Anna Maria Bigatti

- Category set to Parser/Interpreter
- Status changed from New to Resolved
- Assignee set to Anna Maria Bigatti
- Target version set to CoCoA-5.0.2
- % Done changed from 0 to 90
- Estimated time set to 2.00 h

Fixed, but the error is indicated at the operator

```
/**/ ERROR: Cannot embed rational number into ring
(1/7)*f;
  ^
```

The function "TypeValue::convert" in Interpreter.C throws when trying to convert 1/7 into a RingElem in RingOf(f). It does not have enough information to indicate where the error is.

So I added 2 "try.. catch" in "RuntimeEnvironment::binaryOperatorDispatch" around "convert" for left-to-right-type and right-to-left-type. These 2 are the only calls to "Type::convert".

#2 - 20 Mar 2012 16:21 - John Abbott

- Status changed from Resolved to Closed
- % Done changed from 90 to 100