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

```
Use ZZ/(7)[x];
f:=2+x-x;
f/7;  --> ERROR: Division by zero or by a zero-divisor
(1/7)*f;  -->  NASTY ERROR!!
```

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 tying to covert 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