# CoCoA-5 - Feature #274

# InputForm for output readable as input

14 Nov 2012 11:14 - Anna Maria Bigatti

Status: In Progress Start date: 20 Jun 2012

Priority: Normal Due date:

Assignee: Anna Maria Bigatti % Done: 10%

Category:CoCoA-5 function: newEstimated time:4.00 hoursTarget version:CoCoA-5.??Spent time:1.45 hour

# **Description**

Compare these

```
/**/ Record[A := "dsjfhak\"kfdakh"];
Record[A := "dsjfhak\"kfdakh"]
/**/ indent(It);
Record[
   A := "dsjfhak"kfdakh"
]
```

John said in Mathematica the function InputForm prints something in a form that could be given as input. In this case printing a string in the definition of indent could be done with such a function.

Apart from strings: would it really be useful?

## Related issues:

Related to CoCoA-5 - Bug #192: indent prints strings without quotes	Closed	20 Jun 2012
Related to CoCoA-5 - Feature #18: Printing matrices: I/O unified style for Co	Closed	02 Nov 2011
Related to CoCoA-5 - Design #483: Unique copies of rings in CoCoA-5	New	19 Mar 2014
Related to CoCoA-5 - Support #548: Printing rings with ID	Closed	06 May 2014

## History

## #1 - 14 Nov 2012 11:23 - Anna Maria Bigatti

- Tracker changed from Bug to Feature
- Subject changed from indent prints strings without quotes to InputForm for output readable as input
- Category changed from Incomplete function to CoCoA-5 function: new
- Target version changed from CoCoA-5.0.3 to 10
- Estimated time changed from 2.00 h to 4.00 h

#### #2 - 14 Nov 2012 11:31 - Anna Maria Bigatti

- % Done changed from 50 to 10

## #3 - 14 Nov 2012 14:01 - John Abbott

We should probably avoid the name **InputForm**; in the past the people behind Mathematica have not hesitated to sue others (*e.g.* for using the names Sin, Cos and Tan -- with capital letters).

What should the command/function do? Should it behave much like Print, or should it be function which produces a string?

## #4 - 11 Feb 2013 15:37 - Anna Maria Bigatti

- Target version changed from 10 to CoCoA-5.0.9

26 Apr 2024 1/2

## #5 - 02 Aug 2013 16:22 - Anna Maria Bigatti

- Target version changed from CoCoA-5.0.9 to CoCoA-5.1.0 Easter14

## #6 - 19 Mar 2014 21:00 - John Abbott

Here are some thoughts about InputForm (or whatever it will be called):

- it could be a separate command or perhaps a modifier for Print;
- there is no special need for the output to "look nice" or be easily readable by people;
- making it "bullet-proof" could be very hard (e.g. see the example in #18 post 3)

Here are some scenarios to consider: the output is valid input...

- (A) (in the same CoCoA-5 session) when the current ring is the ring of the object printed
- (B) (in the same CoCoA-5 session) regardless of the current ring
- (C) in a different CoCoA-5 session regardless of all earlier computations, ring defns, etc
- (D) in a brand new CoCoA-5 session

JAA thinks that achieving (C) and/or (D) could be difficult. (A) should be the minimum we offer, while (B) would be nice.

## #7 - 04 Apr 2014 16:43 - John Abbott

- Target version changed from CoCoA-5.1.0 Easter14 to CoCoA-5.?.?

26 Apr 2024 2/2