

CoCoALib - Design #1547

Require decimal mode for ostream?

05 Dec 2020 13:55 - John Abbott

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|---|------------------|------------------------|--------------------|
| Status: | Closed | Start date: | 05 Dec 2020 |
| Priority: | Normal | Due date: | |
| Assignee: | John Abbott | % Done: | 100% |
| Category: | Safety | Estimated time: | 0.70 hour |
| Target version: | CoCoALib-0.99800 | Spent time: | 0.70 hour |
| Description | | | |
| In issue #1529 we have decided to require that when reading from an istream the stream must be in decimal mode. Should we require the same for writing to an ostream? | | | |
| If so, maybe we should supply a function which converts an integer (or rational?) to a string using the given base? | | | |
| Related issues: | | | |
| Related to CoCoALib - Design #1529: INPUT questions | | Closed | 31 Oct 2020 |

History

#1 - 05 Dec 2020 13:55 - John Abbott

- Related to Design #1529: INPUT questions added

#2 - 17 Feb 2021 10:09 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

I do not like the idea of converting a BigInt or BigRat to a non-decimal string via normal output operators. [We could produce an explicit fn which does convert BigInt or BigRat to a string using a given base]

I suggest using assertions to check that ostream is in decimal mode; or possibly print out a warning? It could be surprising to the user/programmer if printing can cause an error.

#3 - 17 Feb 2021 10:27 - John Abbott

- Status changed from In Progress to Resolved

- Assignee set to John Abbott

- % Done changed from 10 to 70

I have now added assertions to printing for BigInt, BigRat (which anyway prints a BigInt), PPMonoidElem, and finite fields. That should cover virtually all cases!

PS: and symbol

#4 - 17 Feb 2021 11:06 - John Abbott

- Status changed from Resolved to Feedback

- % Done changed from 70 to 90

I have changed most/all output fns so that they **assert** that the ostream is in decimal mode. Contrast with input fns which **give error** if istream is not in decimal mode.

It is possible that some minor output fns have been skipped... probably not so important.

#5 - 04 Feb 2022 21:50 - John Abbott

- *Status changed from Feedback to Closed*
- *% Done changed from 90 to 100*
- *Estimated time set to 0.70 h*