CoCoA-5 - Bug #1029

Readline: does not recognize interrupts

14 Mar 2017 11:32 - John Abbott

Status:	Closed	**Start date:**	14 Mar 2017
Priority:	Normal	**Due date:**	
Assignee:	John Abbott	**% Done:**	100%
Category:	enhancing/improving	**Estimated time:**	2.02 hours
Target version:	CoCoA-5.4.0	**Spent time:**	2.05 hours

Description

Justin C Walker has pointed out that CoCoA-5's current use of readline does not recognize interrupts (*e.g.* Ctrl-C).

Improve the implementation so that interrupts are recognized.

Related issues:

Related to CoCoA-5 - Bug #1028: Readline: cursor moves wrongly when at start ...	**Closed**	**13 Mar 2017**
Related to CoCoA-5 - Bug #1624: CantStop playing CantStop	**New**	**21 Oct 2021**
Related to CoCoA-5 - Feature #1479: CoCoA release for linux: CoCoAInterpreter...	**Closed**	**07 Aug 2020**

History

#1 - 14 Mar 2017 11:34 - John Abbott

A quick search found the following example use of the readline alternative interface:
http://www.mcld.co.uk/blog/blog.php?274

Someone on StackOverflow said that this can be adapted to allow signal handling.
http://stackoverflow.com/questions/12290411/interrupting-c-c-readline-with-signals

The documentation on the following site suggests that signal handling should be done automatically by readline:
http://www.delorie.com/gnu/docs/readline/rlman_43.html

Now I'm puzzled.

#2 - 17 Mar 2017 14:15 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

I'm still searching for a "ready-to-eat" solution on the internet, and am also reading the readline documentation.

Anyway, I observe that while Ctrl-C seems to be effectively ignored, the desired effect can be achieved by Ctrl-A Ctrl-K ("goto start of line", "clear rest of line"). So maybe it is not that important to resolve this issue.

#3 - 27 Apr 2017 14:55 - Anna Maria Bigatti

- Related to Bug #1028: Readline: cursor moves wrongly when at start of line with a prompt added

#4 - 07 Aug 2020 14:27 - John Abbott

- Assignee set to John Abbott

- Target version changed from CoCoA-5.?.? to CoCoA-5.4.0

- % Done changed from 10 to 50

I have just tried it on my Ubuntu box, and it seemed to work fine.

```
N := factorial(300000);
facs := FactorINT_TrialDiv(N,1000); -- takes a while, so I did ctrl-C
```

I'll also a few other linux users to verify that it works OK for them. MacOS too.
Maybe Microsoft?

UPDATE Julian reports that interrupts are **not recognised** on his Ubuntu 20.04 with libreadline.so.8

#5 - 07 Aug 2020 15:14 - John Abbott

I have asked Julian to run my executable on his Ubuntu machine, and interrupting works; but interrupting did not work with the executable from the official 5.3.2 distribution.
Mysterious!

UPDATE I can report the same behaviour on my computer. Maybe the distributed version includes a "strange" version of libreadline?

#6 - 21 Oct 2021 17:23 - John Abbott

- Related to Bug #1624: CantStop playing CantStop added

#7 - 16 Feb 2022 19:48 - John Abbott

- Status changed from In Progress to Resolved

- % Done changed from 50 to 80

I suppose we should try to test the Linux executable just before distributing it.
Or should I make the executable on my machine?

I have just tried the example from comment 4, and it is definitely interruptible,

#8 - 16 Feb 2022 20:03 - John Abbott

- Related to Feature #1479: CoCoA release for linux: CoCoAInterpreter: with and without libreadline? added

#9 - 18 Feb 2022 16:26 - John Abbott

Maybe the simplest is to add this to the pre-release checks...?

#10 - 23 Feb 2022 12:07 - John Abbott

- % Done changed from 80 to 100

- Estimated time set to 1.88 h

This works for us now (my Ubuntu box, and Anna on the Linux VM).
We hope this means that the problem has been resolved.
Closing.

#11 - 23 Feb 2022 12:07 - John Abbott

- Estimated time changed from 1.88 h to 2.02 h

#12 - 07 Mar 2022 16:58 - John Abbott

- Status changed from Resolved to Closed