Ruby master - Bug #7728

Range#bsearch on other Numerics?
01/23/2013 03:12 AM - marcandre (Marc-Andre Lafortune)

Status: Closed
Priority: Normal
Assignee: marcandre (Marc-Andre Lafortune)
Target version: 2.0.0
ruby -v: r38825

Description
Range#bsearch attempts to do something on generic Numeric classes.

I feel it is both useless and buggy:

(Rational(-1,2)..Rational(9,4)).bsearch{|x| true} # => yields with 7/8 and 33/16
(Rational(-1,2)..Rational(9,4)).bsearch{|x| false} # => loops forever
(BigDecimal('0.5')..BigDecimal('2.25'))... # => same

I feel the current implementation (aside from the bugs) only makes sense on Integers.

Possible approaches:

- Rational
  1) convert to float, or
  2) bsearch accepts a "max iterations" parameter (which would be required for Rational), or
  3) forbid altogether

- BigDecimal
  1) convert to float, or
  2) look at the space of decimal numbers in the range without a higher precision than begin or end.

Given the timeframe though, I recommend we raise a TypeError for both in 2.0.0 (or a NotImplemented if we decide what should be done).

Associated revisions

Revision 38985 - 01/30/2013 05:46 AM - marcandre (Marc-Andre Lafortune)

- range.c: Restrict bsearch to integers [#7728]
- test/ruby/test_range.rb: Test for above

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History

#1 - 01/30/2013 02:48 PM - marcandre (Marc-Andre Lafortune)
- Status changed from Open to Closed
- Assignee set to marcandre (Marc-Andre Lafortune)

Resolved with r38985.