Description

When executing the program attached, I get the following segmentation fault. The segmentation fault is reproducible, but not at a deterministic point in the evaluation (so far somewhere between the 170th and the 205th prime). On previous patch-levels, I also got the segmentation fault.

"/Users/julia/Ruby/Euler/euler060a.rb:85: [BUG] Segmentation fault\nruby 1.9.1p129 (2009-05-12 revision 23412) [i386-darwin9]\n
-- C level backtrace information ---------------------------------------------\n
[NOTE]\nYou may encounter a bug of Ruby interpreter. Bug reports are welcome.\nFor details: http://www.ruby-lang.org/bugreport.html\n=end
=begin
I could reproduce the bug, but with ruby 1.9.2dev (2009-11-17 trunk 25805) [i386-darwin9.8.0], can't reproduce.
It seems a 1.9.1 specific bug.
=end

=begin
I can reproduce this on trunk by running euler060a.rb:

run@paint:/tmp → ruby 475
# of primes: 2 results: [] prime: 7  process time: 0.1
# of primes: 3 results: [] prime: 11 process time: 0.1
# of primes: 4 results: [] prime: 13 process time: 0.1
# of primes: 5 results: [] prime: 17 process time: 0.1
# of primes: 6 results: [] prime: 19 process time: 0.1
# of primes: 7 results: [] prime: 23 process time: 0.1
# of primes: 8 results: [] prime: 29 process time: 0.1
# of primes: 9 results: [] prime: 31 process time: 0.1
# of primes: 10 results: [] prime: 37 process time: 0.1
# of primes: 11 results: [] prime: 41 process time: 0.11
# of primes: 12 results: [] prime: 43 process time: 0.11
# of primes: 13 results: [] prime: 47 process time: 0.11
# of primes: 14 results: [] prime: 53 process time: 0.11
# of primes: 15 results: [] prime: 59 process time: 0.11
# of primes: 16 results: [] prime: 61 process time: 0.11
# of primes: 17 results: [] prime: 67 process time: 0.12
# of primes: 18 results: [] prime: 71 process time: 0.12
# of primes: 19 results: [] prime: 73 process time: 0.12
# of primes: 20 results: [] prime: 79 process time: 0.13
# of primes: 21 results: [] prime: 83 process time: 0.13
# of primes: 22 results: [] prime: 89 process time: 0.14
# of primes: 23 results: [] prime: 97 process time: 0.14
# of primes: 24 results: [] prime: 101 process time: 0.14
# of primes: 25 results: [] prime: 103 process time: 0.14
# of primes: 26 results: [] prime: 107 process time: 0.15
# of primes: 27 results: [] prime: 109 process time: 0.16
# of primes: 28 results: [] prime: 113 process time: 0.16
# of primes: 29 results: [] prime: 127 process time: 0.16
# of primes: 30 results: [] prime: 131 process time: 0.17
# of primes: 31 results: [] prime: 137 process time: 0.18
# of primes: 32 results: [] prime: 139 process time: 0.19
# of primes: 33 results: [] prime: 149 process time: 0.2
# of primes: 34 results: [] prime: 151 process time: 0.21
# of primes: 35 results: [] prime: 157 process time: 0.22
# of primes: 36 results: [] prime: 163 process time: 0.23
# of primes: 37 results: [] prime: 167 process time: 0.24
# of primes: 38 results: [] prime: 173 process time: 0.26
# of primes: 39 results: [] prime: 179 process time: 0.26
# of primes: 40 results: [] prime: 181 process time: 0.27
# of primes: 41 results: [] prime: 191 process time: 0.28
# of primes: 42 results: [] prime: 193 process time: 0.29
# of primes: 43 results: [] prime: 197 process time: 0.3
# of primes: 44 results: [] prime: 199 process time: 0.32
# of primes: 45 results: [] prime: 211 process time: 0.33
# of primes: 46 results: [] prime: 223 process time: 0.34
# of primes: 47 results: [] prime: 227 process time: 0.36
# of primes: 48 results: [] prime: 229 process time: 0.38
# of primes: 49 results: [] prime: 233 process time: 0.38
# of primes: 50 results: [] prime: 239 process time: 0.4
# of primes: 51 results: [] prime: 241 process time: 0.41
# of primes: 52 results: [] prime: 251 process time: 0.43
# of primes: 53 results: [] prime: 257 process time: 0.44
# of primes: 54 results: [] prime: 263 process time: 0.46
# of primes: 55 results: [] prime: 269 process time: 0.47
# of primes: 56 results: [] prime: 271 process time: 0.5
# of primes: 57 results: [] prime: 277 process time: 0.52
# of primes: 58 results: [] prime: 281 process time: 0.54
# of primes: 59 results: [] prime: 283 process time: 0.56
# of primes: 60 results: [] prime: 293 process time: 0.58
# of primes: 61 results: [] prime: 307 process time: 0.6
# of primes: 62 results: [] prime: 311 process time: 0.62
=end
# of primes: 63 results: [] prime: 313 process time: 0.64
# of primes: 64 results: [] prime: 317 process time: 0.65
# of primes: 65 results: [] prime: 331 process time: 0.7
# of primes: 66 results: [] prime: 337 process time: 0.72
# of primes: 67 results: [] prime: 347 process time: 0.81
# of primes: 68 results: [] prime: 349 process time: 0.87
# of primes: 69 results: [] prime: 353 process time: 0.98
# of primes: 70 results: [] prime: 359 process time: 1.01
# of primes: 71 results: [] prime: 367 process time: 1.06
# of primes: 72 results: [] prime: 373 process time: 1.09
# of primes: 73 results: [] prime: 379 process time: 1.14
# of primes: 74 results: [] prime: 383 process time: 1.17
# of primes: 75 results: [] prime: 389 process time: 1.24
# of primes: 76 results: [] prime: 397 process time: 1.28
# of primes: 77 results: [] prime: 401 process time: 1.32
# of primes: 78 results: [] prime: 409 process time: 1.36
# of primes: 79 results: [] prime: 419 process time: 1.44
# of primes: 80 results: [] prime: 421 process time: 1.48
# of primes: 81 results: [] prime: 431 process time: 1.54
# of primes: 82 results: [] prime: 433 process time: 1.61
# of primes: 83 results: [] prime: 439 process time: 1.68
# of primes: 84 results: [] prime: 443 process time: 1.75
# of primes: 85 results: [] prime: 449 process time: 1.88
# of primes: 86 results: [] prime: 457 process time: 1.99
# of primes: 87 results: [] prime: 461 process time: 2.14
# of primes: 88 results: [] prime: 463 process time: 2.33
# of primes: 89 results: [] prime: 467 process time: 2.52
# of primes: 90 results: [] prime: 479 process time: 2.73
# of primes: 91 results: [] prime: 487 process time: 2.95
# of primes: 92 results: [] prime: 491 process time: 3.22
# of primes: 93 results: [] prime: 499 process time: 3.44
# of primes: 94 results: [] prime: 503 process time: 4.16
# of primes: 95 results: [] prime: 509 process time: 5.04
# of primes: 96 results: [] prime: 521 process time: 5.93
# of primes: 97 results: [] prime: 523 process time: 6.85
# of primes: 98 results: [] prime: 541 process time: 7.82
# of primes: 99 results: [] prime: 547 process time: 8.84
# of primes: 100 results: [] prime: 557 process time: 9.88
# of primes: 101 results: [] prime: 563 process time: 10.94
# of primes: 102 results: [] prime: 569 process time: 12.09
# of primes: 103 results: [] prime: 571 process time: 13.27
# of primes: 104 results: [] prime: 577 process time: 14.55
# of primes: 105 results: [] prime: 587 process time: 15.89
# of primes: 106 results: [] prime: 593 process time: 17.33
# of primes: 107 results: [] prime: 599 process time: 18.87
# of primes: 108 results: [] prime: 601 process time: 20.51
# of primes: 109 results: [] prime: 607 process time: 22.33
# of primes: 110 results: [] prime: 613 process time: 24.25
# of primes: 111 results: [] prime: 617 process time: 26.28
# of primes: 112 results: [] prime: 619 process time: 28.43
# of primes: 113 results: [] prime: 631 process time: 30.72
# of primes: 114 results: [] prime: 641 process time: 33.15
# of primes: 115 results: [] prime: 643 process time: 35.71
# of primes: 116 results: [] prime: 647 process time: 38.48
# of primes: 117 results: [] prime: 653 process time: 41.36
# of primes: 118 results: [] prime: 659 process time: 44.44
# of primes: 119 results: [] prime: 661 process time: 47.71
# of primes: 120 results: [] prime: 673 process time: 51.22
# of primes: 121 results: [] prime: 677 process time: 54.99
# of primes: 122 results: [] prime: 683 process time: 58.97
# of primes: 123 results: [] prime: 691 process time: 63.24
# of primes: 124 results: [] prime: 701 process time: 67.83
# of primes: 125 results: [] prime: 709 process time: 73.07
# of primes: 126 results: [] prime: 719 process time: 79.14
# of primes: 127 results: [] prime: 727 process time: 86.81
# of primes: 128 results: [] prime: 733 process time: 95.47
# of primes: 129 results: [] prime: 739 process time: 104.99
# of primes: 130 results: [] prime: 743 process time: 115.57
# of primes: 131 results: [] prime: 751 process time: 127.52
# of primes: 132 results: [] prime: 757 process time: 140.29
# of primes: 133 results: [] prime: 761 process time: 154.83
# of primes: 134 results: [] prime: 769 process time: 171.19
# of primes: 135 results: [] prime: 773 process time: 188.86
# of primes: 136 results: [] prime: 787 process time: 208.75
# of primes: 137 results: [] prime: 797 process time: 231.52
# of primes: 138 results: [] prime: 809 process time: 15.42
# of primes: 139 results: [] prime: 811 process time: 15.87
# of primes: 140 results: [] prime: 821 process time: 16.32
# of primes: 141 results: [] prime: 823 process time: 17.48
# of primes: 142 results: [] prime: 827 process time: 17.99
# of primes: 143 results: [] prime: 829 process time: 18.69
# of primes: 144 results: [] prime: 839 process time: 19.19
# of primes: 145 results: [] prime: 853 process time: 19.82
475:83. [BUG] Segmentation fault
ruby 1.9.3dev (2010-06-01 trunk 28120) [i686-linux]

-- control frame ---------
c:0018 p:---- s:0060 b:0060 l:000059 d:000059 CFUNC :combination
c:0017 p:---- s:0058 b:0058 l:000057 d:000057 CFUNC :each
c:0016 p:---- s:0056 b:0056 l:000055 d:000055 CFUNC :to_a
c:0014 p:---- s:0048 b:0048 l:000047 d:000047 FINISH
c:0013 p:---- s:0046 b:0046 l:000045 d:000045 CFUNC :each
c:0012 p:0155 s:0043 b:0043 l:001ee4 d:000042 BLOCK 475:82
c:0011 p:---- s:0038 b:0038 l:000037 d:000037 FINISH
c:0010 p:---- s:0036 b:0036 l:000035 d:000035 CFUNC :call
c:0008 p:---- s:0030 b:0030 l:000029 d:000029 FINISH
c:0003 p:0086 s:0009 b:0009 l:001ee4 d:000e90 EVAL 475:58
c:0002 p:---- s:0004 b:0004 l:000003 d:000003 FINISH
c:0001 p:0000 s:0002 b:0002 l:001ee4 d:001ee4 TOP

-- Ruby level backtrace information -------------------------------
475:58:in `<main>'
/usr/local/lib/ruby/1.9.1/forwardable.rb:182:in `each'
/usr/local/lib/ruby/1.9.1/prime.rb:269:in `each'
/usr/local/lib/ruby/1.9.1/prime.rb:270:in `block in each'
475:82:in `block in '
475:82:in each'
475:83:in `to_a'
475:83:in `in each'

-- C level backtrace information -----------------------------------
ruby(rb_vm_bugreport+0xa5) [0x8161375]
ruby([0x81a0069]
ruby([0x81a0118]
[0xd9a410]
[0x817300c]
[0x817512d]
[0x81520b9]
[0x8157895]
[0x814d11c]
[0x814d2af]
[0x819d5a9]
[0x81520b9]
[0x8157895]
[0x814d11c]
[0x814d2af]
[0x814df5]
[0x8158541]
[0x815a8e8]
[0x815e2c6]
[0x815f6c0]
[0x8170dc1]
[0x8158541]
[0x815a8e8]
[0x815e2c6]
[0x8151ba6]
Aborted

=end

#3 - 06/27/2010 11:47 PM - mame (Yusuke Endoh)
- Status changed from Open to Assigned
- Assignee set to authorNari (Narihiro Nakamura)
- Target version set to 2.0.0

=begin
Hi,

I confirmed this issue at r28115 of trunk. This issue has been fixed at r28191 in ruby_1_9_2, but not in trunk because the code is quite different between 1_9_2 and trunk because of lazy sweep feature, which is included only in trunk. Narihiro, who is the author of lazy sweep, is assigned.

Here is a log by valgrind:

```
# of primes: 129 results: [] prime: 739 process time: 189.97
# of primes: 130 results: [] prime: 743 process time: 197.16
# of primes: 131 results: [] prime: 751 process time: 205.02
```

```
Invalid read of size 4
```

```
Address 0x501c4d4 is 116 bytes inside a block of size 16,384 free'd
```

=end

08/06/2021 5/6
---
Yusuke Endoh mame@tsg.ne.jp
=end

#4 - 06/29/2010 12:17 PM - Anonymous

- Status changed from Assigned to Closed
- % Done changed from 0 to 100

=begin
This issue was solved with changeset r28472.
Julia, thank you for reporting this issue.
Your contribution to Ruby is greatly appreciated.
May Ruby be with you.
=end

Files
---
euler060a.rb  3.47 KB  08/13/2009  jeheine (Julia Heine)