

Ruby - Bug #19793

Segmentation fault when requiring files after defining Object#method_missing

08/01/2023 04:08 PM - sczimmer (Scott Zimmermann)

Status:	Closed	
Priority:	Normal	
Assignee:		
Target version:		
ruby -v:	ruby 3.2.2 (2023-03-30 revision e51014f9c0) [aarch64-linux]	Backport: 3.0: DONTNEED, 3.1: DONTNEED, 3.2: DONE

Description

I was doing ruby koans to learn ruby and I got a segmentation fault when it gets to the part where it uses Symbol.all_symbols. I realized it happens with any large Array, but I cannot reproduce in a small test script, just when it runs the whole ruby koans. So the minimal way to reproduce I have is:

download rubykoans: https://github.com/edgecase/ruby_koans/blob/master/download/rubykoans.zip?raw=true

```
unzip rubykoans.zip
cd koans
# fix deprecated method call for ruby 3.2
ruby -i -pe 'sub "File.exists", "File.exist"' neo.rb
```

Edit about_asserts.rb, adding these two statements to make a big array to the first koan:

```
def test_assert_truth
  array = []
  99130.times { array << "a string"}
  assert false # This should be true
end
```

run ruby path_to_enlightenment.rb and get a backtrace like the attached backtrace.txt

I've tried this on two servers, ubuntu aarch64 and debian x86_64. On both it crashes with ruby 3.2.2 and works fine with ruby 3.1. On both I installed ruby built from source with RVM. On the server with more ram I had to increase the number more (above it's 99130) to get it to crash.

Associated revisions

Revision 1d096c1e53581ed9fe94694c9760babd1e12e580 - 08/02/2023 01:08 PM - peterzhu2118 (Peter Zhu)

Fix crash in NoMethodError for dummy frames

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to to_str. If method_missing is redefined on Object, then it will call method_missing and attempt raise an error. However, the iseq is invalid as it's a dummy frame so it will write an invalid iseq to the created NoMethodError.

The following script crashes:

```
GC.stress = true

class Object
  public :method_missing
end

File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
```

With the following backtrace:

```
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x000000
```

```

0010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_writen(a=4308637824, oldv=36, b=4308332208, filename="..../iseq.c"
, line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filena
me="..../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at er
ror.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, mesg=4308332496, recv=4304780496, method=8
27660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(mesg=4308332496, recv=4304780496, method=827660, ar
gs=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304
780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x000000016fdf
ab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496) at v
m_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1,
argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=
4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2720:
20
frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data
1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pü") at eval.c:
919:18
frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1
=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=430
4780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0
000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x000000000000
0000) at vm_eval.c:685:12
frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise
=0, index=-1) at object.c:3061:15
frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", m
ethod=3233) at object.c:3153:9
frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4) at
io.c:11655:19
frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfb450, io=4308334032) at i
o.c:13497:5
frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016fdfb
450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
...
frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
...

```

Revision 1d096c1e53581ed9fe94694c9760babb1e12e580 - 08/02/2023 01:08 PM - peterzhu2118 (Peter Zhu)

Fix crash in NoMethodError for dummy frames

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to to_str. If method_missing is redefined on Object, then it will call method_missing and attempt raise an error. However, the iseq is invalid as it's a dummy frame so it will write an invalid iseq to the created NoMethodError.

The following script crashes:

```

GC.stress = true

class Object
  public :method_missing
end

```

```
File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
```

With the following backtrace:

```
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x000000010010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_written(a=4308637824, oldv=36, b=4308332208, filename="../iseq.c", line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filename="../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at error.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, method=827660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660, args=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x000000016fdfab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496) at vm_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1, argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2720:20
frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pü") at eval.c:919:18
frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000) at vm_eval.c:685:12
frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise=0, index=-1) at object.c:3061:15
frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", method=3233) at object.c:3153:9
frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4) at io.c:11655:19
frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfb450, io=4308334032) at io.c:13497:5
frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016fdfb450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
...
frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
...
```

Revision 1d096c1e - 08/02/2023 01:08 PM - peterzhu2118 (Peter Zhu)

Fix crash in NoMethodError for dummy frames

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to `to_str`. If `method_missing` is redefined on Object, then it will call `method_missing` and attempt raise an error. However, the `iseq` is invalid as it's a dummy frame so it will write an invalid `iseq` to the created `NoMethodError`.

The following script crashes:

```
GC.stress = true
```

```
class Object
  public :method_missing
end
```

```
File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
```

With the following backtrace:

```
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x00000001010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_written(a=4308637824, oldv=36, b=4308332208, filename="../iseq.c", line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filename="../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at error.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, method=827660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660, args=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304780496, argc=1, argv=0x0000000106fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x0000000106fdfab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x0000000106fdfab00, obj=4304780496) at vm_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1, argv=0x0000000106fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x0000000106fdfab00, kw_splat=0) at vm_method.c:2720:20
frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pü") at eval.c:919:18
frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000) at vm_eval.c:685:12
frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise=0, index=-1) at object.c:3061:15
frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", method=3233) at object.c:3153:9
frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4) at io.c:11655:19
frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x0000000106fdfb450, io=4308334032) at io.c:13497:5
frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x0000000106fdfb450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
...
frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
...
```

Revision 3c9cb7031154b8666d600b0055ba868e18805dc8 - 08/12/2023 04:48 AM - nagachika (Tomoyuki Chikanaga)

merge revision(s) 1d096c1e53581ed9fe94694c9760babd1e12e580: [Backport #19793]

```
Fix crash in NoMethodError for dummy frames
```

```
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
```

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to `to_str`. If `method_missing` is redefined on Object, then it will call `method_missing` and attempt raise an error. However, the `iseq` is invalid as it's a dummy frame so it will write an invalid `iseq` to the created `NoMethodError`.

The following script crashes:

```
...
GC.stress = true

class Object
  public :method_missing
end

File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
...
```

With the following backtrace:

```
...
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x000000010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_written(a=4308637824, oldv=36, b=4308332208, filename="../iseq.c", line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filename="../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at error.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, method=827660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660, args=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x000000016fdfab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496) at vm_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1, argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2720:20
frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pû") at eval.c:919:18
frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000) at vm_eval.c:685:12
frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise=0, index=-1) at object.c:3061:15
frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", method=3233) at object.c:3153:9
frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
```

```

    frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4
) at io.c:11655:19
    frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfeb450, io=4308334032)
at io.c:13497:5
    frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016
fdfeb450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
    ...
    frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
    frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
    ...
    ...
---
error.c | 4 +++-
test/ruby/test_require.rb | 15 ++++++
2 files changed, 18 insertions(+), 1 deletion(-)

```

Revision 3c9cb7031154b8666d600b0055ba868e18805dc8 - 08/12/2023 04:48 AM - nagachika (Tomoyuki Chikanaga)

merge revision(s) 1d096c1e53581ed9fe94694c9760babd1e12e580: [Backport #19793]

```

Fix crash in NoMethodError for dummy frames
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit

```

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to to_str. If method_missing is redefined on Object, then it will call method_missing and attempt raise an error. However, the iseq is invalid as it's a dummy frame so it will write an invalid iseq to the created NoMethodError.

The following script crashes:

```

...
GC.stress = true

class Object
  public :method_missing
end

File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
...

```

With the following backtrace:

```

...
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x0
00000010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_writen(a=4308637824, oldv=36, b=4308332208, filename="../ise
q.c", line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, fi
lename="../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) a
t error.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, meth
od=827660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660
, args=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=
4304780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x00000001
6fdfab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496)
at vm_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc

```

```
=1, argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
  frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952,
obj=4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2
720:20
  frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
  frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587),
data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pû") at eva
l.c:919:18
  frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), d
ata1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
  frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv
=4304780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
  frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv
=0x0000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
  frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x00000000
00000000) at vm_eval.c:685:12
  frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, r
aise=0, index=-1) at object.c:3061:15
  frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String
", method=3233) at object.c:3153:9
  frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
  frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fptr=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4
) at io.c:11655:19
  frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfb450, io=4308334032)
at io.c:13497:5
  frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016
fdfb450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
...
  frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
  frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
...
---
error.c | 4 +++-
test/ruby/test_require.rb | 15 ++++++
2 files changed, 18 insertions(+), 1 deletion(-)
```

Revision 3c9cb703 - 08/12/2023 04:48 AM - nagachika (Tomoyuki Chikanaga)

merge revision(s) 1d096c1e53581ed9fe94694c9760babd1e12e580: [Backport #19793]

```
Fix crash in NoMethodError for dummy frames
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 8bit
```

[Bug #19793]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to to_str. If method_missing is redefined on Object, then it will call method_missing and attempt raise an error. However, the iseq is invalid as it's a dummy frame so it will write an invalid iseq to the created NoMethodError.

The following script crashes:

```
...
GC.stress = true
```

```
class Object
  public :method_missing
end
```

```
File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
...
```

With the following backtrace:

```
...
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x0
00000010180b000) at gc.c:8822:9
```

```

    frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
    frame #4: 0x000000010016aff0 miniruby`rb_obj_written(a=4308637824, oldv=36, b=4308332208, filename="../../../iseq.c", line=1279) at gc.h:804:9
    frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filename="../../../iseq.c", line=1279) at gc.h:837:5
    frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
    frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
    frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at error.c:1830:35
    frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, method=827660) at error.c:1869:12
    frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660, args=4308332448, priv=0) at error.c:1957:5
    frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
    frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x000000016fdfab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
    frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496) at vm_eval.c:944:5
    ...
    frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1, argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
    frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2720:20
    frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
    frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pû") at eval.c:919:18
    frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
    frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
    frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
    frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000000) at vm_eval.c:685:12
    frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise=0, index=-1) at object.c:3061:15
    frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", method=3233) at object.c:3153:9
    frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
    frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4) at io.c:11655:19
    frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfb450, io=4308334032) at io.c:13497:5
    frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016fdfb450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
    ...
    frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
    frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
    ...
    ...
---
error.c | 4 +++-
test/ruby/test_require.rb | 15 ++++++
2 files changed, 18 insertions(+), 1 deletion(-)

```

History

#1 - 08/01/2023 06:32 PM - byroot (Jean Boussier)

So instead of 99130.times { array << "a string" } you can just add GC.start and it will also crash.

I also tested it's still failing on master. I'll see if this can be reduced.

#2 - 08/01/2023 09:03 PM - peterzhu2118 (Peter Zhu)

Thank you for reporting this bug.

The following script is a minimal reproduction:

```

GC.stress = true

class Object
  public :method_missing

```

end

```
File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
```

I have a fix in this PR: <https://github.com/ruby/ruby/pull/8155>

#3 - 08/01/2023 09:03 PM - peterzhu2118 (Peter Zhu)

- Backport changed from 3.0: UNKNOWN, 3.1: UNKNOWN, 3.2: UNKNOWN to 3.0: DONTNEED, 3.1: DONTNEED, 3.2: REQUIRED

#4 - 08/01/2023 09:59 PM - byroot (Jean Boussier)

- Subject changed from Segmentation fault with large arrays to Segmentation when requiring files after defining Object#method_missing

#5 - 08/01/2023 11:22 PM - sczimmer (Scott Zimmermann)

thanks, you all are fast :)

#6 - 08/02/2023 06:43 AM - byroot (Jean Boussier)

- Subject changed from Segmentation when requiring files after defining Object#method_missing to Segmentation fault when requiring files after defining Object#method_missing

#7 - 08/02/2023 01:08 PM - peterzhu2118 (Peter Zhu)

- Status changed from Open to Closed

Applied in changeset [git1d096c1e53581ed9fe94694c9760babd1e12e580](https://github.com/ruby/ruby/commit/1d096c1e53581ed9fe94694c9760babd1e12e580).

Fix crash in NoMethodError for dummy frames

[Bug [#19793](#)]

Dummy frames are created at the top level when requiring another file. While requiring a file, it will try to convert using encodings. Some of these encodings will not respond to to_str. If method_missing is redefined on Object, then it will call method_missing and attempt raise an error. However, the iseq is invalid as it's a dummy frame so it will write an invalid iseq to the created NoMethodError.

The following script crashes:

```
GC.stress = true
```

```
class Object
  public :method_missing
end
```

```
File.write("/tmp/empty.rb", "")
require "/tmp/empty.rb"
```

With the following backtrace:

```
frame #0: 0x00000001000fa8b8 miniruby`RVALUE_MARKED(obj=4308637824) at gc.c:1638:12
frame #1: 0x00000001000fb440 miniruby`RVALUE_BLACK_P(obj=4308637824) at gc.c:1763:12
frame #2: 0x00000001000facdc miniruby`gc_writebarrier_incremental(a=4308637824, b=4308332208, objspace=0x00000001010180b000) at gc.c:8822:9
frame #3: 0x00000001000faad8 miniruby`rb_gc_writebarrier(a=4308637824, b=4308332208) at gc.c:8864:17
frame #4: 0x000000010016aff0 miniruby`rb_obj_writen(a=4308637824, oldv=36, b=4308332208, filename="../iseq.c", line=1279) at gc.h:804:9
frame #5: 0x0000000100162a60 miniruby`rb_obj_write(a=4308637824, slot=0x0000000100d09888, b=4308332208, filename="../iseq.c", line=1279) at gc.h:837:5
frame #6: 0x0000000100165b0c miniruby`iseqw_new(iseq=0x0000000100d09880) at iseq.c:1279:9
frame #7: 0x0000000100165a64 miniruby`rb_iseqw_new(iseq=0x0000000100d09880) at iseq.c:1289:12
frame #8: 0x00000001000d8324 miniruby`name_err_init_attr(exc=4309777920, recv=4304780496, method=827660) at error.c:1830:35
frame #9: 0x00000001000d1b80 miniruby`name_err_init(exc=4309777920, msg=4308332496, recv=4304780496, method=827660) at error.c:1869:12
frame #10: 0x00000001000d1bd4 miniruby`rb_nomethod_err_new(msg=4308332496, recv=4304780496, method=827660, args=4308332448, priv=0) at error.c:1957:5
frame #11: 0x000000010039049c miniruby`rb_make_no_method_exception(exc=4304914512, format=4308332496, obj=4304780496, argc=1, argv=0x000000016fdfab00, priv=0) at vm_eval.c:959:16
frame #12: 0x00000001003b3274 miniruby`raise_method_missing(ec=0x0000000100b06f40, argc=1, argv=0x000000016fdf
```

```
ab00, obj=4304780496, last_call_status=MISSING_NOENTRY) at vm_eval.c:999:15
frame #13: 0x00000001003945d4 miniruby`rb_method_missing(argc=1, argv=0x000000016fdfab00, obj=4304780496) at v
m_eval.c:944:5
...
frame #23: 0x000000010038f5e4 miniruby`rb_vm_call_kw(ec=0x0000000100b06f40, recv=4304780496, id=2865, argc=1,
argv=0x000000016fdfab00, me=0x0000000100cbfcf0, kw_splat=0) at vm_eval.c:326:12
frame #24: 0x00000001003c18e4 miniruby`call_method_entry(ec=0x0000000100b06f40, defined_class=4304927952, obj=
4304780496, id=2865, cme=0x0000000100cbfcf0, argc=1, argv=0x000000016fdfab00, kw_splat=0) at vm_method.c:2720:
20
frame #25: 0x00000001003c440c miniruby`check_funcall_exec(v=6171896792) at vm_eval.c:589:12
frame #26: 0x00000001000dec00 miniruby`rb_vrescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data
1=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792, args="Pä") at eval.c:
919:18
frame #27: 0x00000001000deab0 miniruby`rb_rescue2(b_proc=(miniruby`check_funcall_exec at vm_eval.c:587), data1
=6171896792, r_proc=(miniruby`check_funcall_failed at vm_eval.c:596), data2=6171896792) at eval.c:900:17
frame #28: 0x000000010039008c miniruby`check_funcall_missing(ec=0x0000000100b06f40, klass=4304923536, recv=430
4780496, mid=3233, argc=0, argv=0x0000000000000000, respond=-1, def=36, kw_splat=0) at vm_eval.c:666:15
frame #29: 0x000000010038fa60 miniruby`rb_check_funcall_default_kw(recv=4304780496, mid=3233, argc=0, argv=0x0
000000000000000, def=36, kw_splat=0) at vm_eval.c:703:21
frame #30: 0x000000010038fb04 miniruby`rb_check_funcall(recv=4304780496, mid=3233, argc=0, argv=0x0000000000000
000) at vm_eval.c:685:12
frame #31: 0x00000001001c469c miniruby`convert_type_with_id(val=4304780496, tname="String", method=3233, raise
=0, index=-1) at object.c:3061:15
frame #32: 0x00000001001c4a4c miniruby`rb_check_convert_type_with_id(val=4304780496, type=5, tname="String", m
ethod=3233) at object.c:3153:9
frame #33: 0x00000001002d59f8 miniruby`rb_check_string_type(str=4304780496) at string.c:2571:11
frame #34: 0x000000010014b7b0 miniruby`io_encoding_set(fp=0x0000000100d09ca0, v1=4304780496, v2=4, opt=4) at
io.c:11655:19
frame #35: 0x0000000100139a58 miniruby`rb_io_set_encoding(argc=1, argv=0x000000016fdfb450, io=4308334032) at i
o.c:13497:5
frame #36: 0x00000001003c0004 miniruby`ractor_safe_call_cfunc_m1(recv=4308334032, argc=1, argv=0x000000016fdfb
450, func=(miniruby`rb_io_set_encoding at io.c:13487)) at vm_insnhelper.c:3271:12
...
frame #43: 0x0000000100390b08 miniruby`rb_funcall(recv=4308334032, mid=16593, n=1) at vm_eval.c:1137:12
frame #44: 0x00000001002a43d8 miniruby`load_file_internal(argp_v=6171899936) at ruby.c:2500:5
...
```

- #8 - 08/12/2023 04:48 AM - nagachika (Tomoyuki Chikanaga)
- Backport changed from 3.0: DONTNEED, 3.1: DONTNEED, 3.2: REQUIRED to 3.0: DONTNEED, 3.1: DONE, 3.2: REQUIRED
- #9 - 08/12/2023 04:49 AM - nagachika (Tomoyuki Chikanaga)
- Backport changed from 3.0: DONTNEED, 3.1: DONE, 3.2: REQUIRED to 3.0: DONTNEED, 3.1: DONTNEED, 3.2: DONE

ruby_3_2 3c9cb7031154b8666d600b0055ba868e18805dc8 merged revision(s) 1d096c1e53581ed9fe94694c9760babb1e12e580.

Files			
backtrace.txt	21.7 KB	08/01/2023	sczimmer (Scott Zimmermann)