

Ruby - Bug #16510

irb crashes when hitting 'Home' or 'End' keys

01/15/2020 03:22 PM - packerbacker89 (Josh Johnson)

Status:	Closed	
Priority:	Normal	
Assignee:		
Target version:		
ruby -v:	2.7.0	Backport: 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN

Description

There were similar bugs opened in the past few months, but they all appear to be closed.

System: Ruby 2.7.0, reline 0.1.2, irb 1.2.1

Open irb and hit the 'Home' or 'End' key on the keyboard. This should go to the beginning / end of the line. Instead, the console crashes and the following traceback is provided:

```
35: from /x/ruby-2.7.0/bin/irb:23:in `'
34: from /x/ruby-2.7.0/bin/irb:23:in `load'
33: from /x/ruby-2.7.0/lib/ruby/gems/2.7.0/gems/irb-1.2.1/exe/irb:11:in `'
32: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:398:in `start'
31: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:469:in `run'
30: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:469:in `catch'
29: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:470:in `block in run'
28: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:535:in `eval_input'
27: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:134:in `each_top_level_statement'
26: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:134:in `catch'
25: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:135:in `block in each_top_level_statement'
24: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:135:in `loop'
23: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:138:in `block (2 levels) in each_top_level_statement'
22: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/ruby-lex.rb:166:in `lex'
21: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:516:in `block in eval_input'
20: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:693:in `signal_status'
19: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb.rb:517:in `block (2 levels) in eval_input'
18: from /x/ruby-2.7.0/lib/ruby/2.7.0/irb/input-method.rb:258:in `gets'
17: from /x/ruby-2.7.0/lib/ruby/2.7.0/forwardable.rb:235:in `readmultiline'
16: from /x/ruby-2.7.0/lib/ruby/2.7.0/forwardable.rb:235:in `readmultiline'
15: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:170:in `readmultiline'
14: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:232:in `inner_readline'
13: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:232:in `loop'
12: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:233:in `block in inner_readline'
11: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:262:in `read_io'
10: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:262:in `loop'
9: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:286:in `block in read_io'
8: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:234:in `block (2 levels) in inner_readline'
7: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:234:in `each'
6: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline.rb:235:in `block (3 levels) in inner_readline'
5: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/line_editor.rb:829:in `input_key'
4: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/line_editor.rb:787:in `normal_char'
3: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/line_editor.rb:758:in `process_key'
2: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/line_editor.rb:1109:in `ed_insert'
1: from /x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/unicode.rb:70:in `get_mbcchar_width'
/x/ruby-2.7.0/gems/reline-0.1.2/lib/reline/unicode.rb:70:in `encode': "\xCf" from ASCII-8BIT to UTF-8 (Encoding::UndefinedConversionError)
```

In addition, hitting the 'Insert', 'Page Up', and 'Page Down' keys result in odd characters shown in the console (such as "^[[2~"). This is only a minor issue compared to the console crash.

Associated revisions

Revision 5d124a3b68982e779946804b5b9578c403c6bdf2 - 01/29/2020 06:11 AM - aycabta (aycabta .)

[ruby/reline] Support GNOME style Home/End key sequences [Bug #16510]

<https://github.com/ruby/reline/commit/788f0df845>

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Revision 0057fe4063b57b445d6ffc893e442f362e3a19e0 - 03/30/2020 10:09 AM - aycabta (aycabta .)

Ruby 2.7 backport about IRB (#2990)

- [ruby/reline] Sort completion list

Legacy mode:

```
$ irb --legacy
irb(main):001:0> l[TAB][TAB]
lambda          load          local_variables  loop
```

Before this patch:

```
$ irb
irb(main):001:0> l[TAB][TAB]
local_variables
loop
lambda
load
```

After this patch:

```
$ irb
irb(main):001:0> l[TAB][TAB]
lambda
load
local_variables
loop
```

<https://github.com/ruby/reline/commit/6074069c7d>

- Drop an invalid char as UTF-8
- Add test_completion_with_indent_and_completer_quote_characters

This is for 8a705245e55575d4d310a2e956b89a36a5931971.

- [ruby/irb] Add tests for RubyLex

The `set_auto_indent` method calculates the correct number of spaces for indenting a line. We think there might be a few bugs in this method so we are testing the current functionality to make sure nothing breaks when we address those bugs.

Example test failure:

```
1) Failure:
TestIRB::TestRubyLex#test_auto_indent [/Users/Ben/Projects/irb/test/irb/test_ruby_lex.rb:75]:
Calculated the wrong number of spaces for:
def each_top_level_statement
  initialize_input
  catch(:TERM_INPUT) do
    loop do
```

```

begin
  prompt
  unless l = lex
    throw :TERM_INPUT if @line == ''
  else
    .
  end
end
<10> expected but was
<12>.

```

<https://github.com/ruby/irb/commit/752d5597ab>

- [ruby/reline] Degenerate the terminal size to [\$LINES, \$COLUMNS] if it is unknown

This is a workaround for <https://github.com/ruby/irb/issues/50>

<https://github.com/ruby/reline/commit/5725677d1a>

- [ruby/irb] Fix newline depth with multiple braces

This commit fixes the `check_newline_depth_difference` method to multiple open braces on one line into account. Before this change we were subtracting from the depth in `check_newline_depth_difference` on every open brace. This is the right thing to do if the opening and closing brace are on the same line. For example in a method definition we have an opening and closing parentheses we want to add 1 to our depth, and then remove it.

```

def foo()
end

```

However this isn't the correct behavior when the brace spans multiple lines. If a brace spans multiple lines we don't want to subtract from `check_newline_depth_difference` and we want to treat the braces the same way as we do end and allow `check_corresponding_token_depth` to pop the correct depth.

Example of bad behavior:

```

def foo()
[
]
puts 'bar'
end

```

Example of desired behavior:

```

def foo()
[
]
  puts 'bar'
end

```

<https://github.com/ruby/irb/commit/7dc8af01e0>

- text/readline/test_readline.rb - fix skip on Reline (#2743)

TestRelineAsReadline#test_input_metachar passes on MinGW

- Add "require 'openstruct'" what is forgotten
- [ruby/irb] Fix lib name of OpenStruct

<https://github.com/ruby/irb/commit/1f3a84ab6b>

- Add load path and require for ruby/ruby
- Rescue EOFError

If C-d is pressed before IRB is ready, IRB crashes because EOFError occurs.

- Complete indented and quoted string correctly

```

def foo

```

".upca[TAB]

This will be completed to be:

```
def foo
".upcase
```

The indent was gone. This commit fixes the bug.

- [ruby/irb] Fix crashing when multiple open braces per line

<https://github.com/ruby/irb/issues/55>

If we had put multiple open braces on a line the with no closing brace spaces_of_nest array keeps getting '0' added to it. This means that when we pop off of this array we are saying that we should be in position zero for the next line. This is an issue because we don't always want to be in position 0 after a closing brace.

Example:

```
[ [ [
]
]
]
```

In the above example the 'spaces_of_nest' array looks like this after the first line is entered: [0,0,0]. We really want to be indented 4 spaces for the 1st closing brace 2 for the 2nd and 0 for the 3rd. i.e. we want it to be: [0,2,4].

We also saw this issue with a heredoc inside of an array.

```
[ <<FOO]
hello
FOO
```

<https://github.com/ruby/irb/commit/80c69c8272>

- Support history-size in .inputrc correctly
- Introduce an abstracted structure about the encoding of Reline

The command prompt on Windows always uses Unicode to take input and print output but most Reline implementation depends on Encoding.default_external. This commit introduces an abstracted structure about the encoding of Reline.

- Remove an unused setting variable
- Use Reline.encoding_system_needs if exists
- Add tests for vi_insert and vi_add
- Implement vi_insert_at_bol and vi_add_at_eol
- [ruby/reline] Implement vi_to_next_char

<https://github.com/ruby/reline/commit/066ecb0a21>

- [ruby/reline] Implement vi_prev_char and vi_to_prev_char

<https://github.com/ruby/reline/commit/0ad3ee63fa>

- [ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there

<https://github.com/ruby/readline-ext/commit/4d44c12832>

- Stop using minitest dependent methods
- Skip a test that uses assert_ruby_status if it doesn't exist
- Use omit instead of skip

- Check DONT_RUN_RELINE_TEST envvar
- [ruby/irb] Add newline_before_multiline_output

<https://github.com/ruby/irb/commit/9eb1801a66>

- [ruby/irb] Fix compatibility with rails before 5.2

Rails before 5.2 added Array#append as an alias to Array#<< , so that it expects only one argument. However ruby-2.5 added Array#append as an alias to Array#push which takes any number of arguments.

If irb completion is used in rails c (for example "IO.")

it fails with:

irb/completion.rb:206:in `<<': wrong number of arguments (given 3, expected 1) (ArgumentError)

Using Array#push instead of Array#append fixes compatibility.

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- Reline: Use a more robust detection of MinTTY

The previous detection per get_screen_size fails when stdout is passed to a pipe. That is the case when running ruby tests in parallel ("-j" switch). In this case Reline believes that it's running on MinTTY and the tests are running with ANSI IOGate instead of the Windows adapter on MINGW. So parallel test results were different to that of a single process. This commit fixes these differences.

The code is taken from git sources and translated to ruby.

NtQueryObject() is replaced by GetFileInformationByHandleEx(), because

NtQueryObject() is undocumented and is more difficult to use:

<https://github.com/git-for-windows/git/blob/c5a03b1e29c69f3f06c8fabd92493edb73469176/compat/winansi.c#L558>

- Reline: Fix changed test results due to change to UTF-8 on Windows

In commit f8ea2860b0cac1aec79978e6c44168802958e8af the Reline encoding for native windows console was changed to hardcoded UTF-8.

This caused failures in reline and readline tests, but they were hidden, because parallel ruby tests incorrectly used Reline::ANSI as IOGate. Tests failures were raised in single process mode, but not with -j switch.

This patch corrects encodings on native Windows console.

- [ruby/irb] [ruby/irb] Rewrite an expression to detect multiline

<https://github.com/ruby/irb/commit/ed5cf375a6>

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- [ruby/reline] Implement vi_change_meta

<https://github.com/ruby/reline/commit/8538e0e10f>

- Always refer to Reline::IOGate.encoding
- Always use UTF-8 for Reline::GeneralIO on Windows
- Use test_mode on Reline::History::Test for encoding
- [ruby/reline] Support GNOME style Home/End key sequences [Bug #16510]

<https://github.com/ruby/reline/commit/788f0df845>

- [ruby/irb] Add a new easter egg: dancing ruby

<https://github.com/ruby/irb/commit/e37dc7e58e>

- [ruby/irb] Exclude useless files from RDoc

<https://github.com/ruby/irb/commit/8f1ab2400c>

- [ruby/irb] Exclude useless files from RDoc
- Fix inaccuracy in encoding tests

These tests assume

`Encoding.find('locale') == Encoding.find('external')`
and fail if they are distinct.

- [ruby/reline] Fix Reline::Windows#scroll_down

I mistook Right and Bottom.

<https://github.com/ruby/reline/commit/8be401c5f5>

- [ruby/reline] Bypass cursor down when a char is rendered at eol on Windows

A newline is automatically inserted if a character is rendered at eol on Windows command prompt.

<https://github.com/ruby/reline/commit/4bfea07e4a>

- [ruby/reline] Organize special keys escape sequences

<https://github.com/ruby/reline/commit/41deb1a3d9>

- [ruby/readline-ext] Remove unnecessary `-I$(top_srcdir)` when it's an individual gem

<https://github.com/ruby/readline-ext/commit/efaca4a5f4>

- [ruby/readline-ext] Check TestRelineAsReadline existence

<https://github.com/ruby/readline-ext/commit/c0a6303168>

- [ruby/readline-ext] The ruby/assert.h is adopted by Ruby 2.7 or later

<https://github.com/ruby/readline-ext/commit/106c31fc1b>

- Revert "[ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there"

This reverts commit 425b2064d394639101854c83a061a0918b33b857.

This cherry-pick was a mistake.

- [ruby/readline-ext] Use require check instead of DONT_RUN_RELINE_TEST env

<https://github.com/ruby/readline-ext/commit/1df99d1481>

- [ruby/readline-ext] Add spec.extensions

<https://github.com/ruby/readline-ext/commit/8c33abb13c>

- [ruby/readline-ext] Use rake/extensiontask to build

<https://github.com/ruby/readline-ext/commit/b0b5f709bd>

- Fix readline build dependency
- [ruby/irb] Add test_complete_symbol

<https://github.com/ruby/irb/commit/dbbf086c1f>

- [ruby/irb] Check doc namespace correctly

IRB::InputCompletor::PerfectMatchedProc crashes when doc not found because a variable name was incorrect.

<https://github.com/ruby/irb/commit/889fd4928f>

- [ruby/irb] Fix auto indent with closed brace

A closed brace in auto-indent shouldn't affect the next brace in the same line, but it behaves like below:

```
p() {  
}
```

It's a bug.

<https://github.com/ruby/irb/commit/fbe59e344f>

- [ruby/irb] Use 0.step instead of (..0).each for Ruby 2.5

<https://github.com/ruby/irb/commit/5d628ca40e>

- Revert "[ruby/irb] Add test_complete_symbol"

This reverts commit 3af3431c2c145134996e66f3d8d9ade8ad81bde0.

- [ruby/irb] fix reserved words and completion for them

<https://github.com/ruby/irb/commit/6184b227ad>

- Add test_complete_symbol

The previous version of the test method used a symbol, ":abcdefg" to complete but longer symbols that can be completed are defined by other test methods of other libs.

- test/irb/test_completion.rb: suppress a warning: unused literal ignored
- [ruby/reline] Use IO#write instead of IO#print

IO#print always adds a string of \$\\ automatically.

<https://github.com/ruby/reline/commit/a93119c847>

- [ruby/irb] Version 1.2.2

<https://github.com/ruby/irb/commit/a71753f15a>

- [ruby/reline] Version 0.1.3

<https://github.com/ruby/reline/commit/ea2b182466>

- [ruby/irb] Include easter-egg.rb in gemspec

irb doesn't run because this file isn't included in the gem.

<https://github.com/ruby/irb/commit/73cda56d25>

- [ruby/irb] Version 1.2.3

<https://github.com/ruby/irb/commit/dd56e06df5>

- support multi-run test for test_readline.rb
- [ruby/irb] yield outside method definition is a syntax error

<https://github.com/ruby/irb/commit/dbc7b059c7>

- test/readline - allow ENV control of test class creation

In ruby/ruby, the tests run on both readline & reline by creating four test classes:

```
TestReadline  
TestReadlineHistory
```

```
TestRelineAsReadline  
TestRelineAsReadlineHistory
```

Reline imports the test files and uses them in its CI. Adding the ENV control allows it to only run the TestRelineAsReadline classes.

- Omit test_using_quoting_detection_proc_with_multibyte_input temporarily for random order test
- support random order test.

test_readline:
HISTORY should be empty.

test_using_quoting_detection_proc:
test_using_quoting_detection_proc_with_multibyte_input:
Readline.completer_quote_characters= and
Readline.completer_word_break_characters= doesn't accept nil,
so skip if previous values are nil.

- Set Readline.completion_append_character = nil always

GNU Readline add a white space when Readline.completion_append_character is not initialized.

- Fix a typo [ci skip]
- skip test if Reline.completion_proc is nil.

Some other tests can set Reline.completion_proc, so if it is nil, simply skip this test.

- Reset Reline.point

TestRelineAsReadline#test_insert_text expects Readline.point == 0 at the beginning of the test, but a test violate this assumption.

- Convert incompatible encoding symbol names
- Ignore incompatible convert of symbols
- Add workaround for test-bundler failure

https://github.com/ruby/actions/runs/500526558?check_suite_focus=true#step:16:127

Failures:

- ```
1) Bundler.setup when Bundler is bundled doesn't blow up
 Failure/Error: expect(err).to be_empty
```

```
expected `fatal: not a git repository (or any of the parent directories): .git\nfatal: not a git repository (or any of the parent directories): .git\nfatal: not a git repository (or any of the parent directories): .git\n.empty?` to return true, got false
```

```
Commands:
$ /home/runner/work/actions/actions/snapshot-master/ruby \
-I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
-rsupport/hax -rsupport/artifice/fail \
/home/runner/work/actions/actions/snapshot-master/libexec/bundle install --retry 0
Resolving dependencies...
Using bundler 2.1.4
Bundle complete! 1 Gemfile dependency, 1 gem now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
```

```
$ /home/runner/work/actions/actions/snapshot-master/ruby \
-I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
-rsupport/hax -rsupport/artifice/fail \
/home/runner/work/actions/actions/snapshot-master/libexec/bundle exec ruby -e \
require\ \'bundler\';\ Bundler.setup
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
./spec/bundler/runtime/setup_spec.rb:1056:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (2 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:78:in `block (2 levels) in <top (required)>'
make: *** [yes-test-bundler] Error 1
```



- [ruby/irb] Unnamed groups are not captured when named groups are used

<https://github.com/ruby/irb/commit/0a641a69b0>

- [ruby/reline] Work with wrong \$/ value correctly

<https://github.com/ruby/reline/commit/962ebf5a1b>

- [ruby/irb] Detect multiple lines output simplify

The old implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
/\/A.*\Z/ !~ ('abc' * 20_000_000)
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5868 MB
62.226 MB
```

```
real 0m1.307s
user 0m0.452s
sys 0m0.797s
```

The new implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
('abc' * 20_000_000).include?("\n")
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5861 MB
62.226 MB
```

```
real 0m0.132s
user 0m0.088s
sys 0m0.042s
```

<https://github.com/ruby/irb/commit/40d6610baf>

- [ruby/reline] Suppress error in case INPUTRC env is empty

<https://github.com/ruby/reline/commit/bce7e7562b>

- [ruby/reline] Add yamatanooroti rendering test

<https://github.com/ruby/reline/commit/f092519525>

- [ruby/reline] Rename test suite name of yamatanooroti test

<https://github.com/ruby/reline/commit/b0f32f5de4>

- [ruby/reline] Add a comment why rescue yamatanooroti loading error on the test

<https://github.com/ruby/reline/commit/2a8061daec>

- [ruby/irb] Suppress crashing when EncodingError has occurred without lineno

<https://github.com/ruby/irb/commit/13572d8cdc>

- [ruby/reline] Suppress error when check ambiguous char width in LANG=C

<https://github.com/ruby/reline/commit/623dffdd75>

- [ruby/io-console] Enable only interrupt bits on intr: true

<https://github.com/ruby/io-console/commit/baaf929041>

- [ruby/io-console] bump up to 0.5.4
- [ruby/io-console] Update the minimum requirement of Ruby version

<https://github.com/ruby/io-console/commit/73e7b6318a>

- [ruby/io-console] Filter Ruby engine name rather than just /ruby/

This breaks tests using this path on JRuby because the jruby executable turns into jjruby after the sub.

<https://github.com/ruby/io-console/commit/e5951aa34c>

- [ruby/io-console] bump up to 0.5.5
- [ruby/io-console] Prefer keyword arguments

<https://github.com/ruby/io-console/commit/5facbfc4c8>

- [ruby/io-console] [DOC] Improved about intr:

<https://github.com/ruby/io-console/commit/82b630cd79>

- [ruby/io-console] Just ignore the extension on other than CRuby

<https://github.com/ruby/io-console/commit/41b6f09574>

- [ruby/io-console] bump up to 0.5.6

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Revision 0057fe4063b57b445d6ffc893e442f362e3a19e0 - 03/30/2020 10:09 AM - aycabta (aycabta .)

Ruby 2.7 backport about IRB (#2990)

- [ruby/reline] Sort completion list

#### Legacy mode:

```
$ irb --legacy
irb(main):001:0> l[TAB] [TAB]
lambda load local_variables loop
```

#### Before this patch:

```
$ irb
irb(main):001:0> l[TAB] [TAB]
local_variables
loop
lambda
load
```

#### After this patch:

```
$ irb
irb(main):001:0> l[TAB] [TAB]
lambda
load
local_variables
loop
```

<https://github.com/ruby/reline/commit/6074069c7d>

- Drop an invalid char as UTF-8
- Add test\_completion\_with\_indent\_and\_completer\_quote\_characters

This is for 8a705245e55575d4d310a2e956b89a36a5931971.

- [ruby/irb] Add tests for RubyLex

The `set_auto_indent` method calculates the correct number of spaces for indenting a line. We think there might be a few bugs in this method so we are testing the current functionality to make sure nothing breaks when we address those bugs.

Example test failure:

```
1) Failure:
TestIRB::TestRubyLex#test_auto_indent [/Users/Ben/Projects/irb/test/irb/test_ruby_lex.rb:75]:
Calculated the wrong number of spaces for:
def each_top_level_statement
 initialize_input
 catch(:TERM_INPUT) do
 loop do
 begin
 prompt
 unless l = lex
 throw :TERM_INPUT if @line == ''
 else
 .
 end
 end
 end
 end
end
<10> expected but was
<12>.
```

<https://github.com/ruby/irb/commit/752d5597ab>

- [ruby/reline] Degenerate the terminal size to [\$LINES, \$COLUMNS] if it is unknown

This is a workaround for <https://github.com/ruby/irb/issues/50>

<https://github.com/ruby/reline/commit/5725677d1a>

- [ruby/irb] Fix newline depth with multiple braces

This commit fixes the `check_newline_depth_difference` method to multiple open braces on one line into account. Before this change we were subtracting from the depth in `check_newline_depth_difference` on every open brace. This is the right thing to do if the opening and closing brace are on the same line. For example in a method definition we have an opening and closing parentheses we want to add 1 to our depth, and then remove it.

```
def foo()
end
```

However this isn't the correct behavior when the brace spans multiple lines. If a brace spans multiple lines we don't want to subtract from `check_newline_depth_difference` and we want to treat the braces the same way as we do end and allow `check_corresponding_token_depth` to pop the correct depth.

Example of bad behavior:

```
def foo()
 [
]
 puts 'bar'
end
```

Example of desired behavior:

```
def foo()
 [
]
 puts 'bar'
end
```

<https://github.com/ruby/irb/commit/7dc8af01e0>

- text/readline/test\_readline.rb - fix skip on Reline (#2743)

TestRelineAsReadline#test\_input\_metachar passes on MinGW

- Add "require 'openstruct'" what is forgotten
- [ruby/irb] Fix lib name of OpenStruct

<https://github.com/ruby/irb/commit/1f3a84ab6b>

- Add load path and require for ruby/ruby
- Rescue EOFError

If C-d is pressed before IRB is ready, IRB crashes because EOFError occurs.

- Complete indented and quoted string correctly

```
def foo
 ".upca[TAB]
```

This will be completed to be:

```
def foo
 ".upcase
```

The indent was gone. This commit fixes the bug.

- [ruby/irb] Fix crashing when multiple open braces per line

<https://github.com/ruby/irb/issues/55>

If we had put multiple open braces on a line the with no closing brace spaces\_of\_nest array keeps getting '0' added to it. This means that when we pop off of this array we are saying that we should be in position zero for the next line. This is an issue because we don't always want to be in position 0 after a closing brace.

Example:

```
[[[
]
]
]
```

In the above example the 'spaces\_of\_nest' array looks like this after the first line is entered: [0,0,0]. We really want to be indented 4 spaces for the 1st closing brace 2 for the 2nd and 0 for the 3rd. i.e. we want it to be: [0,2,4].

We also saw this issue with a heredoc inside of an array.

```
[<<FOO]
hello
FOO
```

<https://github.com/ruby/irb/commit/80c69c8272>

- Support history-size in .inputrc correctly
- Introduce an abstracted structure about the encoding of Reline

The command prompt on Windows always uses Unicode to take input and print output but most Reline implementation depends on Encoding.default\_external. This commit introduces an abstracted structure about the encoding of Reline.

- Remove an unused setting variable
- Use Reline.encoding\_system\_needs if exists

- Add tests for vi\_insert and vi\_add
- Implement vi\_insert\_at\_bol and vi\_add\_at\_eol
- [ruby/reline] Implement vi\_to\_next\_char

<https://github.com/ruby/reline/commit/066ecb0a21>

- [ruby/reline] Implement vi\_prev\_char and vi\_to\_prev\_char

<https://github.com/ruby/reline/commit/0ad3ee63fa>

- [ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there

<https://github.com/ruby/readline-ext/commit/4d44c12832>

- Stop using minitest dependent methods
- Skip a test that uses assert\_ruby\_status if it doesn't exist
- Use omit instead of skip
- Check DONT\_RUN\_RELINE\_TEST envvar
- [ruby/irb] Add newline\_before\_multiline\_output

<https://github.com/ruby/irb/commit/9eb1801a66>

- [ruby/irb] Fix compatibility with rails before 5.2

Rails before 5.2 added Array#append as an alias to Array#<< , so that it expects only one argument. However ruby-2.5 added Array#append as an alias to Array#push which takes any number of arguments.

If irb completion is used in rails c (for example "IO.") it fails with:

irb/completion.rb:206:in `<<': wrong number of arguments (given 3, expected 1) (ArgumentError)

Using Array#push instead of Array#append fixes compatibility.

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- Reline: Use a more robust detection of MinTTY

The previous detection per get\_screen\_size fails when stdout is passed to a pipe. That is the case when running ruby tests in parallel ("-j" switch). In this case Reline believes that it's running on MinTTY and the tests are running with ANSI IOGate instead of the Windows adapter on MINGW. So parallel test results were different to that of a single process. This commit fixes these differences.

The code is taken from git sources and translated to ruby. NtQueryObject() is replaced by GetFileInformationByHandleEx(), because NtQueryObject() is undocumented and is more difficult to use:

<https://github.com/git-for-windows/git/blob/c5a03b1e29c69f3f06c8fabd92493edb73469176/compat/winansi.c#L558>

- Reline: Fix changed test results due to change to UTF-8 on Windows

In commit f8ea2860b0cac1aec79978e6c44168802958e8af the Reline encoding for native windows console was changed to hardcoded UTF-8. This caused failures in reline and readline tests, but they were hidden, because parallel ruby tests incorrectly used Reline::ANSI as IOGate. Tests failures were raised in single process mode, but not with -j switch.

This patch corrects encodings on native Windows console.

- [ruby/irb] [ruby/irb] Rewrite an expression to detect multiline

<https://github.com/ruby/irb/commit/ed5cf375a6>

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- [ruby/reline] Implement vi\_change\_meta

<https://github.com/ruby/reline/commit/8538e0e10f>

- Always refer to Reline::IOGate.encoding
- Always use UTF-8 for Reline::GeneralIO on Windows
- Use test\_mode on Reline::History::Test for encoding
- [ruby/reline] Support GNOME style Home/End key sequences [Bug #16510]

<https://github.com/ruby/reline/commit/788f0df845>

- [ruby/irb] Add a new easter egg: dancing ruby

<https://github.com/ruby/irb/commit/e37dc7e58e>

- [ruby/irb] Exclude useless files from RDoc

<https://github.com/ruby/irb/commit/8f1ab2400c>

- [ruby/irb] Exclude useless files from RDoc
- Fix inaccuracy in encoding tests

These tests assume

Encoding.find('locale') == Encoding.find('external')  
and fail if they are distinct.

- [ruby/reline] Fix Reline::Windows#scroll\_down

I mistook Right and Bottom.

<https://github.com/ruby/reline/commit/8be401c5f5>

- [ruby/reline] Bypass cursor down when a char is rendered at eol on Windows

A newline is automatically inserted if a character is rendered at eol on  
Windows command prompt.

<https://github.com/ruby/reline/commit/4bfea07e4a>

- [ruby/reline] Organize special keys escape sequences

<https://github.com/ruby/reline/commit/41deb1a3d9>

- [ruby/readline-ext] Remove unnecessary -I\$(top\_srcdir) when it's an individual gem

<https://github.com/ruby/readline-ext/commit/efaca4a5f4>

- [ruby/readline-ext] Check TestRelineAsReadline existence

<https://github.com/ruby/readline-ext/commit/c0a6303168>

- [ruby/readline-ext] The ruby/assert.h is adopted by Ruby 2.7 or later

<https://github.com/ruby/readline-ext/commit/106c31fc1b>

- Revert "[ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there"

This reverts commit 425b2064d394639101854c83a061a0918b33b857.

This cherry-pick was a mistake.

- [ruby/readline-ext] Use require check instead of DONT\_RUN\_RELINE\_TEST env

<https://github.com/ruby/readline-ext/commit/1df99d1481>

- [ruby/readline-ext] Add spec.extensions

<https://github.com/ruby/readline-ext/commit/8c33abb13c>

- [ruby/readline-ext] Use rake/extendedtask to build

<https://github.com/ruby/readline-ext/commit/b0b5f709bd>

- Fix readline build dependency
- [ruby/irb] Add test\_complete\_symbol

<https://github.com/ruby/irb/commit/dbbf086c1f>

- [ruby/irb] Check doc namespace correctly

IRB::InputCompletor::PerfectMatchedProc crashes when doc not found because a variable name was incorrect.

<https://github.com/ruby/irb/commit/889fd4928f>

- [ruby/irb] Fix auto indent with closed brace

A closed brace in auto-indent shouldn't affect the next brace in the same line, but it behaves like below:

```
p() {
}
```

It's a bug.

<https://github.com/ruby/irb/commit/fbe59e344f>

- [ruby/irb] Use 0.step instead of (..0).each for Ruby 2.5

<https://github.com/ruby/irb/commit/5d628ca40e>

- Revert "[ruby/irb] Add test\_complete\_symbol"

This reverts commit 3af3431c2c145134996e66f3d8d9ade8ad81bde0.

- [ruby/irb] fix reserved words and completion for them

<https://github.com/ruby/irb/commit/6184b227ad>

- Add test\_complete\_symbol

The previous version of the test method used a symbol, ":abcdefg" to complete but longer symbols that can be completed are defined by other test methods of other libs.

- test/irb/test\_completion.rb: suppress a warning: unused literal ignored
- [ruby/reline] Use IO#write instead of IO#print

IO#print always adds a string of \$\ automatically.

<https://github.com/ruby/reline/commit/a93119c847>

- [ruby/irb] Version 1.2.2

<https://github.com/ruby/irb/commit/a71753f15a>

- [ruby/reline] Version 0.1.3

<https://github.com/ruby/reline/commit/ea2b182466>

- [ruby/irb] Include easter-egg.rb in gemspec

irb doesn't run because this file isn't included in the gem.

<https://github.com/ruby/irb/commit/73cda56d25>

- [ruby/irb] Version 1.2.3

<https://github.com/ruby/irb/commit/dd56e06df5>

- support multi-run test for test\_readline.rb

- [ruby/irb] yield outside method definition is a syntax error

<https://github.com/ruby/irb/commit/dbc7b059c7>

- test/readline - allow ENV control of test class creation

In ruby/ruby, the tests run on both readline & reline by creating four test classes:

```
TestReadline
TestReadlineHistory

TestRelineAsReadline
TestRelineAsReadlineHistory
```

Reline inherits the test files and uses them in its CI. Adding the ENV control allows it to only run the TestRelineAsReadline classes.

- Omit test\_using\_quoting\_detection\_proc\_with\_multibyte\_input temporarily for random order test
- support random order test.

test\_readline:  
HISTORY should be empty.

test\_using\_quoting\_detection\_proc:  
test\_using\_quoting\_detection\_proc\_with\_multibyte\_input:  
Readline.completer\_quote\_characters= and  
Readline.completer\_word\_break\_characters= doesn't accept nil,  
so skip if previous values are nil.

- Set Readline.completion\_append\_character = nil always

GNU Readline add a white space when Readline.completion\_append\_character is not initialized.

- Fix a typo [ci skip]
- skip test if Reline.completion\_proc is nil.

Some other tests can set Reline.completion\_proc, so if it is nil, simply skip this test.

- Reset Reline.point

TestRelineAsReadline#test\_insert\_text expects Readline.point == 0 at the beginning of the test, but a test violate this assumption.

- Convert incompatible encoding symbol names
- Ignore incompatible convert of symbols
- Add workaround for test-bundler failure

[https://github.com/ruby/actions/runs/500526558?check\\_suite\\_focus=true#step:16:127](https://github.com/ruby/actions/runs/500526558?check_suite_focus=true#step:16:127)

Failures:

```
1) Bundler.setup when Bundler is bundled doesn't blow up
 Failure/Error: expect(err).to be_empty

 expected `\"fatal: not a git repository (or any of the parent directories): .git\nfatal: not a git repository (o...the parent directories): .git\nfatal: not a git repository (or any of the parent directories): .git\n.empty?` to return true, got false

Commands:
$ /home/runner/work/actions/actions/snapshot-master/ruby \
 -I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
 -rsupport/hax -rsupport/artifice/fail \
 /home/runner/work/actions/actions/snapshot-master/libexec/bundle install --retry 0
Resolving dependencies...
Using bundler 2.1.4
```



```
Bundle complete! 1 Gemfile dependency, 1 gem now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
```

```
$ /home/runner/work/actions/actions/snapshot-master/ruby \
-I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
-rsupport/hax -rsupport/artifice/fail \
/home/runner/work/actions/actions/snapshot-master/libexec/bundle exec ruby -e \
require\ \'bundler\' \; \ Bundler.setup
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
./spec/bundler/runtime/setup_spec.rb:1056:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (2 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:78:in `block (2 levels) in <top (required)>'
make: *** [yes-test-bundler] Error 1
```

- [ruby/irb] Unnamed groups are not captured when named groups are used

<https://github.com/ruby/irb/commit/0a641a69b0>

- [ruby/reline] Work with wrong \$/ value correctly

<https://github.com/ruby/reline/commit/962ebf5a1b>

- [ruby/irb] Detect multiple lines output simplify

The old implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
/\A.*\Z/ !~ ('abc' * 20_000_000)
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5868 MB
62.226 MB
```

```
real 0m1.307s
user 0m0.452s
sys 0m0.797s
```

The new implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
('abc' * 20_000_000).include?("\n")
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5861 MB
62.226 MB
```

```
real 0m0.132s
user 0m0.088s
sys 0m0.042s
```

<https://github.com/ruby/irb/commit/40d6610baf>

- [ruby/reline] Suppress error in case INPUTRC env is empty

<https://github.com/ruby/reline/commit/bce7e7562b>

- [ruby/reline] Add yamatanooroti rendering test

<https://github.com/ruby/reline/commit/f092519525>

- [ruby/reline] Rename test suite name of yamatanooroti test

<https://github.com/ruby/reline/commit/b0f32f5de4>

- [ruby/reline] Add a comment why rescue yamatanooroti loading error on the test

<https://github.com/ruby/reline/commit/2a8061daec>

- [ruby/irb] Suppress crashing when EncodingError has occurred without lineno

<https://github.com/ruby/irb/commit/13572d8cdc>

- [ruby/reline] Suppress error when check ambiguous char width in LANG=C

<https://github.com/ruby/reline/commit/623dffd75>

- [ruby/io-console] Enable only interrupt bits on intr: true

<https://github.com/ruby/io-console/commit/baaf929041>

- [ruby/io-console] bump up to 0.5.4

- [ruby/io-console] Update the minimum requirement of Ruby version

<https://github.com/ruby/io-console/commit/73e7b6318a>

- [ruby/io-console] Filter Ruby engine name rather than just /ruby/

This breaks tests using this path on JRuby because the jruby executable turns into jruby after the sub.

<https://github.com/ruby/io-console/commit/e5951aa34c>

- [ruby/io-console] bump up to 0.5.5

- [ruby/io-console] Prefer keyword arguments

<https://github.com/ruby/io-console/commit/5facbfc4c8>

- [ruby/io-console] [DOC] Improved about intr:

<https://github.com/ruby/io-console/commit/82b630cd79>

- [ruby/io-console] Just ignore the extension on other than CRuby

<https://github.com/ruby/io-console/commit/41b6f09574>

- [ruby/io-console] bump up to 0.5.6

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**Revision 0057fe40 - 03/30/2020 10:09 AM - aycabta (aycabta .)**

Ruby 2.7 backport about IRB (#2990)

- [ruby/reline] Sort completion list

**Legacy mode:**

```
$ irb --legacy
irb(main):001:0> 1[TAB][TAB]
lambda load local_variables loop
```

#### Before this patch:

```
$ irb
irb(main):001:0> 1[TAB][TAB]
local_variables
loop
lambda
load
```

#### After this patch:

```
$ irb
irb(main):001:0> 1[TAB][TAB]
lambda
load
local_variables
loop
```

<https://github.com/ruby/reline/commit/6074069c7d>

- Drop an invalid char as UTF-8
- Add test\_completion\_with\_indent\_and\_completer\_quote\_characters

This is for 8a705245e55575d4d310a2e956b89a36a5931971.

- [ruby/irb] Add tests for RubyLex

The `set_auto_indent` method calculates the correct number of spaces for indenting a line. We think there might be a few bugs in this method so we are testing the current functionality to make sure nothing breaks when we address those bugs.

#### Example test failure:

```
1) Failure:
TestIRB::TestRubyLex#test_auto_indent [/Users/Ben/Projects/irb/test/irb/test_ruby_lex.rb:75]:
Calculated the wrong number of spaces for:
 def each_top_level_statement
 initialize_input
 catch(:TERM_INPUT) do
 loop do
 begin
 prompt
 unless l = lex
 throw :TERM_INPUT if @line == ''
 else
 .
<10> expected but was
<12>.
```

<https://github.com/ruby/irb/commit/752d5597ab>

- [ruby/reline] Degenerate the terminal size to [\$LINES, \$COLUMNS] if it is unknown

This is a workaround for <https://github.com/ruby/irb/issues/50>

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- [ruby/irb] Fix newline depth with multiple braces

This commit fixes the `check_newline_depth_difference` method to multiple open braces on one line into account. Before this change we were subtracting from the depth in `check_newline_depth_difference` on every open brace. This is the right thing to do if the opening and closing brace are on the same line. For example in a method definition we have an opening and closing parentheses we want to add 1 to our depth, and then remove it.

```
def foo()
```

end

However this isn't the correct behavior when the brace spans multiple lines. If a brace spans multiple lines we don't want to subtract from `check_newline_depth_difference` and we want to treat the braces the same way as we do end and allow `check_corresponding_token_depth` to pop the correct depth.

Example of bad behavior:

```
def foo()
 [
]
 puts 'bar'
end
```

Example of desired behavior:

```
def foo()
 [
]
 puts 'bar'
end
```

<https://github.com/ruby/irb/commit/7dc8af01e0>

- `text/readline/test_readline.rb` - fix skip on Reline (#2743)

TestRelineAsReadline#test\_input\_metachar passes on MinGW

- Add "require 'openstruct'" what is forgotten
- [ruby/irb] Fix lib name of OpenStruct

<https://github.com/ruby/irb/commit/1f3a84ab6b>

- Add load path and require for ruby/ruby
- Rescue EOFError

If C-d is pressed before IRB is ready, IRB crashes because EOFError occurs.

- Complete indented and quoted string correctly

```
def foo
 ".upca[TAB]
```

This will be completed to be:

```
def foo
".upcase
```

The indent was gone. This commit fixes the bug.

- [ruby/irb] Fix crashing when multiple open braces per line

<https://github.com/ruby/irb/issues/55>

If we had put multiple open braces on a line the with no closing brace `spaces_of_nest` array keeps getting '0' added to it. This means that when we pop off of this array we are saying that we should be in position zero for the next line. This is an issue because we don't always want to be in position 0 after a closing brace.

Example:

```
[[[
]
]
]
```

In the above example the `'spaces_of_nest'` array looks like this after

the first line is entered: [0,0,0]. We really want to be indented 4 spaces for the 1st closing brace 2 for the 2nd and 0 for the 3rd. i.e. we want it to be: [0,2,4].

We also saw this issue with a heredoc inside of an array.

```
[<<FOO]
hello
FOO
```

<https://github.com/ruby/irb/commit/80c69c8272>

- Support history-size in .inputrc correctly
- Introduce an abstracted structure about the encoding of Reline

The command prompt on Windows always uses Unicode to take input and print output but most Reline implementation depends on Encoding.default\_external. This commit introduces an abstracted structure about the encoding of Reline.

- Remove an unused setting variable
- Use Reline.encoding\_system\_needs if exists
- Add tests for vi\_insert and vi\_add
- Implement vi\_insert\_at\_bol and vi\_add\_at\_eol
- [ruby/reline] Implement vi\_to\_next\_char

<https://github.com/ruby/reline/commit/066ecb0a21>

- [ruby/reline] Implement vi\_prev\_char and vi\_to\_prev\_char

<https://github.com/ruby/reline/commit/0ad3ee63fa>

- [ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there

<https://github.com/ruby/readline-ext/commit/4d44c12832>

- Stop using minitest dependent methods
- Skip a test that uses assert\_ruby\_status if it doesn't exist
- Use omit instead of skip
- Check DONT\_RUN\_RELINE\_TEST envvar
- [ruby/irb] Add newline\_before\_multiline\_output

<https://github.com/ruby/irb/commit/9eb1801a66>

- [ruby/irb] Fix compatibility with rails before 5.2

Rails before 5.2 added Array#append as an alias to Array#<<, so that it expects only one argument. However ruby-2.5 added Array#append as an alias to Array#push which takes any number of arguments.

If irb completion is used in rails c (for example "IO.")

it fails with:

irb/completion.rb:206:in `<<': wrong number of arguments (given 3, expected 1) (ArgumentError)

Using Array#push instead of Array#append fixes compatibility.

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- Reline: Use a more robust detection of MinTTY

The previous detection per get\_screen\_size fails when stdout is passed to a pipe. That is the case when running ruby tests in parallel ("-j" switch). In this case Reline believes that it's running on MinTTY and the tests

are running with ANSI IOGate instead of the Windows adapter on MINGW.  
So parallel test results were different to that of a single process.  
This commit fixes these differences.

The code is taken from git sources and translated to ruby.  
NtQueryObject() is replaced by GetFileInformationByHandleEx(), because  
NtQueryObject() is undocumented and is more difficult to use:  
<https://github.com/git-for-windows/git/blob/c5a03b1e29c69f3f06c8fabd92493edb73469176/compat/winansi.c#L558>

- Reline: Fix changed test results due to change to UTF-8 on Windows

In commit f8ea2860b0cac1aec79978e6c44168802958e8af the Reline encoding  
for native windows console was changed to hardcoded UTF-8.  
This caused failures in reline and readline tests, but they were hidden,  
because parallel ruby tests incorrectly used Reline::ANSI as IOGate.  
Tests failures were raised in single process mode, but not with -j switch.

This patch corrects encodings on native Windows console.

- [ruby/irb] [ruby/irb] Rewrite an expression to detect multiline

<https://github.com/ruby/irb/commit/ed5cf375a6>

<https://github.com/ruby/irb/commit/5b7bbf9c34>

- [ruby/reline] Implement vi\_change\_meta

<https://github.com/ruby/reline/commit/8538e0e10f>

- Always refer to Reline::IOGate.encoding
- Always use UTF-8 for Reline::GeneralIO on Windows
- Use test\_mode on Reline::History::Test for encoding
- [ruby/reline] Support GNOME style Home/End key sequences [Bug #16510]

<https://github.com/ruby/reline/commit/788f0df845>

- [ruby/irb] Add a new easter egg: dancing ruby

<https://github.com/ruby/irb/commit/e37dc7e58e>

- [ruby/irb] Exclude useless files from RDoc

<https://github.com/ruby/irb/commit/8f1ab2400c>

- [ruby/irb] Exclude useless files from RDoc
- Fix inaccuracy in encoding tests

These tests assume  
Encoding.find('locale') == Encoding.find('external')  
and fail if they are distinct.

- [ruby/reline] Fix Reline::Windows#scroll\_down

I mistook Right and Bottom.

<https://github.com/ruby/reline/commit/8be401c5f5>

- [ruby/reline] Bypass cursor down when a char is rendered at eol on Windows

A newline is automatically inserted if a character is rendered at eol on  
Windows command prompt.

<https://github.com/ruby/reline/commit/4bfea07e4a>

- [ruby/reline] Organize special keys escape sequences

<https://github.com/ruby/reline/commit/41deb1a3d9>

- [ruby/readline-ext] Remove unnecessary -I\$(top\_srcdir) when it's an individual gem

<https://github.com/ruby/readline-ext/commit/efaca4a5f4>

- [ruby/readline-ext] Check TestRelineAsReadline existence

<https://github.com/ruby/readline-ext/commit/c0a6303168>

- [ruby/readline-ext] The ruby/assert.h is adopted by Ruby 2.7 or later

<https://github.com/ruby/readline-ext/commit/106c31fc1b>

- Revert "[ruby/readline-ext] Include ruby/assert.h in ruby/ruby.h so that assertions can be there"

This reverts commit 425b2064d394639101854c83a061a0918b33b857.

This cherry-pick was a mistake.

- [ruby/readline-ext] Use require check instead of DONT\_RUN\_RELINE\_TEST env

<https://github.com/ruby/readline-ext/commit/1df99d1481>

- [ruby/readline-ext] Add spec.extensions

<https://github.com/ruby/readline-ext/commit/8c33abb13c>

- [ruby/readline-ext] Use rake/extensiontask to build

<https://github.com/ruby/readline-ext/commit/b0b5f709bd>

- Fix readline build dependency
- [ruby/irb] Add test\_complete\_symbol

<https://github.com/ruby/irb/commit/dbbf086c1f>

- [ruby/irb] Check doc namespace correctly

IRB::InputCompletor::PerfectMatchedProc crashes when doc not found because a variable name was incorrect.

<https://github.com/ruby/irb/commit/889fd4928f>

- [ruby/irb] Fix auto indent with closed brace

A closed brace in auto-indent shouldn't affect the next brace in the same line, but it behaves like below:

```
p() {
}
```

It's a bug.

<https://github.com/ruby/irb/commit/fbe59e344f>

- [ruby/irb] Use 0.step instead of (..0).each for Ruby 2.5

<https://github.com/ruby/irb/commit/5d628ca40e>

- Revert "[ruby/irb] Add test\_complete\_symbol"

This reverts commit 3af3431c2c145134996e66f3d8d9ade8ad81bde0.

- [ruby/irb] fix reserved words and completion for them

<https://github.com/ruby/irb/commit/6184b227ad>

- Add test\_complete\_symbol

The previous version of the test method used a symbol, ":abcdefg" to complete but longer symbols that can be completed are defined by other test methods of other libs.

- test/irb/test\_completion.rb: suppress a warning: unused literal ignored
- [ruby/reline] Use IO#write instead of IO#print

IO#print always adds a string of \$\\ automatically.

<https://github.com/ruby/reline/commit/a93119c847>

- [ruby/irb] Version 1.2.2

<https://github.com/ruby/irb/commit/a71753f15a>

- [ruby/reline] Version 0.1.3

<https://github.com/ruby/reline/commit/ea2b182466>

- [ruby/irb] Include easter-egg.rb in gemspec

irb doesn't run because this file isn't included in the gem.

<https://github.com/ruby/irb/commit/73cda56d25>

- [ruby/irb] Version 1.2.3

<https://github.com/ruby/irb/commit/dd56e06df5>

- support multi-run test for test\_readline.rb
- [ruby/irb] yield outside method definition is a syntax error

<https://github.com/ruby/irb/commit/dbc7b059c7>

- test/readline - allow ENV control of test class creation

In ruby/ruby, the tests run on both readline & reline by creating four test classes:

```
TestReadline
TestReadlineHistory

TestRelineAsReadline
TestRelineAsReadlineHistory
```

Reline inports the test files and uses them in its CI. Adding the ENV control allows it to only run the TestRelineAsReadline classes.

- Omit test\_using\_quoting\_detection\_proc\_with\_multibyte\_input temporarily for random order test
- support random order test.

test\_readline:  
HISTORY should be empty.

test\_using\_quoting\_detection\_proc:  
test\_using\_quoting\_detection\_proc\_with\_multibyte\_input:  
Readline.completer\_quote\_characters= and  
Readline.completer\_word\_break\_characters= doesn't accept nil,  
so skip if previous values are nil.

- Set Readline.completion\_append\_character = nil always

GNU Readline add a white space when Readline.completion\_append\_character is not initialized.

- Fix a typo [ci skip]
- skip test if Reline.completion\_proc is nil.

Some other tests can set Reline.completion\_proc, so if it is nil, simply skip this test.

- Reset Reline.point

TestRelineAsReadline#test\_insert\_text expects Readline.point == 0 at the beginning of the test, but a test violate this assumption.

- Convert incompatible encoding symbol names



- Ignore incompatible convert of symbols
- Add workaround for test-bundler failure

[https://github.com/ruby/actions/runs/500526558?check\\_suite\\_focus=true#step:16:127](https://github.com/ruby/actions/runs/500526558?check_suite_focus=true#step:16:127)

Failures:

```
1) Bundler.setup when Bundler is bundled doesn't blow up
 Failure/Error: expect(err).to be_empty
```

```
expected `fatal: not a git repository (or any of the parent directories): .git\nfatal: not a git repository (or any of the parent directories): .git\nfatal: not a git repository (or any of the parent directories): .git\n.empty?` to return true, got false
```

```
Commands:
$ /home/runner/work/actions/actions/snapshot-master/ruby \
-I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
-rsupport/hax -rsupport/artifice/fail \
/home/runner/work/actions/actions/snapshot-master/libexec/bundle install --retry 0
Resolving dependencies...
Using bundler 2.1.4
Bundle complete! 1 Gemfile dependency, 1 gem now installed.
Use `bundle info [gemname]` to see where a bundled gem is installed.
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
```

```
$ /home/runner/work/actions/actions/snapshot-master/ruby \
-I/home/runner/work/actions/actions/snapshot-master/lib:/home/runner/work/actions/actions/snapshot-master/spec/bundler \
-rsupport/hax -rsupport/artifice/fail \
/home/runner/work/actions/actions/snapshot-master/libexec/bundle exec ruby -e \
require\ \'bundler\' \; Bundler.setup
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
fatal: not a git repository (or any of the parent directories): .git
$? => 0
./spec/bundler/runtime/setup_spec.rb:1056:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (3 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:111:in `block (2 levels) in <top (required)>'
./spec/bundler/spec_helper.rb:78:in `block (2 levels) in <top (required)>'
make: *** [yes-test-bundler] Error 1
```

- [ruby/irb] Unnamed groups are not captured when named groups are used

<https://github.com/ruby/irb/commit/0a641a69b0>

- [ruby/reline] Work with wrong \$/ value correctly

<https://github.com/ruby/reline/commit/962ebf5a1b>

- [ruby/irb] Detect multiple lines output simplify

The old implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
/\A.*\Z/ !~ ('abc' * 20_000_000)
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5868 MB
62.226 MB
```

```
real 0m1.307s
user 0m0.452s
sys 0m0.797s
```

The new implementation performance test code:

```
require 'objspace'
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
('abc' * 20_000_000).include?("\n")
puts "%.5g MB" % (ObjectSpace.memsize_of_all * 0.001 * 0.001)
```

and run time test.rb:

```
2.5861 MB
62.226 MB
```

```
real 0m0.132s
user 0m0.088s
sys 0m0.042s
```

<https://github.com/ruby/irb/commit/40d6610baf>

- [ruby/reline] Suppress error in case INPUTRC env is empty

<https://github.com/ruby/reline/commit/bce7e7562b>

- [ruby/reline] Add yamatanooroti rendering test

<https://github.com/ruby/reline/commit/f092519525>

- [ruby/reline] Rename test suite name of yamatanooroti test

<https://github.com/ruby/reline/commit/b0f32f5de4>

- [ruby/reline] Add a comment why rescue yamatanooroti loading error on the test

<https://github.com/ruby/reline/commit/2a8061daec>

- [ruby/irb] Suppress crashing when EncodingError has occurred without lineno

<https://github.com/ruby/irb/commit/13572d8cdc>

- [ruby/reline] Suppress error when check ambiguous char width in LANG=C

<https://github.com/ruby/reline/commit/623dffdd75>

- [ruby/io-console] Enable only interrupt bits on intr: true

<https://github.com/ruby/io-console/commit/baaf929041>

- [ruby/io-console] bump up to 0.5.4
- [ruby/io-console] Update the minimum requirement of Ruby version

<https://github.com/ruby/io-console/commit/73e7b6318a>

- [ruby/io-console] Filter Ruby engine name rather than just /ruby/

This breaks tests using this path on JRuby because the jruby executable turns into jruby after the sub.

<https://github.com/ruby/io-console/commit/e5951aa34c>

- [ruby/io-console] bump up to 0.5.5
- [ruby/io-console] Prefer keyword arguments

<https://github.com/ruby/io-console/commit/5facbfc4c8>

- [ruby/io-console] [DOC] Improved about intr:

<https://github.com/ruby/io-console/commit/82b630cd79>

- [ruby/io-console] Just ignore the extension on other than CRuby

<https://github.com/ruby/io-console/commit/41b6f09574>

- [ruby/io-console] bump up to 0.5.6

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## History

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### #1 - 01/15/2020 03:23 PM - packerbacker89 (Josh Johnson)

Note: none of this behavior occurs in Ruby 2.6.5. This is related exclusively to 2.7.0.

### #2 - 01/16/2020 11:42 AM - aycabta (aycabta .)

What OS and virtual console software (Terminal.app, command prompt, xterm...) are you using?

### #3 - 01/17/2020 08:21 PM - packerbacker89 (Josh Johnson)

I've found the issue using RedHat 6.10 and reproduced the behavior in CentOS 6.

I was using GNOME Terminal (v 2.31.3) when I discovered the issue.

I checked, and it is working *somewhat* correctly in xterm and konsole. That is, it does not crash upon hitting 'Home' or 'End'. The odd characters still appear upon hitting 'Insert', 'Page Up', and 'Page Down'.

### #4 - 01/18/2020 02:04 AM - nobu (Nobuyoshi Nakada)

- Description updated

### #5 - 01/21/2020 08:23 AM - mame (Yusuke Endoh)

It works perfectly for me. I'm using GNOME Terminal (GNOME Terminal 3.34.2 using VTE 0.58.2 +BIDI +GNUTLS) in Ubuntu 19.10.

### #6 - 01/22/2020 08:05 PM - jaruga (Jun Aruga)

Hi, packerbacker89.

Here are the centos 6 containers, tag 6 and 6.X.

[https://hub.docker.com/\\_/centos/](https://hub.docker.com/_/centos/)

If you can reproduce the error on the containers, and you can provide the Dockerfile to reproduce it, it might be helpful.

### #7 - 01/23/2020 09:28 AM - aycabta (aycabta .)

@packerbacker89

Could you show a full result of `gnome-terminal --version`?

[@jaruga \(Jun Aruga\)](#)

I think the CUI access via Docker is sometimes not good. It's not perfect compatibility.

### #8 - 01/24/2020 07:58 PM - packerbacker89 (Josh Johnson)

[@aycabta \(aycabta .\)](#)

Here is the gnome-terminal version: GNOME Terminal 2.31.3

[@jaruga \(Jun Aruga\)](#)

I'll try to work on reproducing it via the container when I have some time.

### #9 - 01/29/2020 06:12 AM - aycabta (aycabta .)

- Status changed from Open to Closed

Applied in changeset [git|5d124a3b68982e779946804b5b9578c403c6bdf2](https://github.com/ruby/ruby/commit/5d124a3b68982e779946804b5b9578c403c6bdf2).

---

[ruby/reline] Support GNOME style Home/End key sequences [Bug [#16510](#)]

<https://github.com/ruby/reline/commit/788f0df845>

**#10 - 01/29/2020 06:15 AM - aycabta (aycabta .)**

This bug was based on unsupported key sequences environment. This was a good chance to survey it for me. Thank you.

ref. <http://blog.bachi.net/?p=2082>

**#11 - 06/28/2020 07:07 PM - yvo@yvo.net (Yvo van Beek)**

I noticed this issue when I connect to my Ubuntu 20.04 server and I press Home or End in the Rails console. This is a new issue introduced with Ruby 2.7.0.

I was using the macOS terminal and I had the Home key mapped to \033[H and the End key mapped to \033[F. Those key commands seem to crash the IRB (UndefinedConversionError).

Now that I'm using macOS Catalina with ZSH, I can use \001 for Home and \005 for End. That provides a workaround for this issue. See <https://apple.stackexchange.com/a/271648/192935> for more information on the key mappings.