

Ruby - Bug #19569

#map on Enumerator::Lazy block arguments seem to differ from regular #map

04/03/2023 01:03 PM - TomNaessens (Tom Naessens)

Status:	Closed	
Priority:	Normal	
Assignee:		
Target version:		
ruby -v:	3.0.5...3.2.0	Backport: 2.7: UNKNOWN, 3.0: UNKNOWN, 3.1: UNKNOWN, 3.2: UNKNOWN

Description

A Ruby 2 to 3 upgrade surfaced the following issue:

Ruby 2:

```
irb(main):252:0> [1, 2, 3].to_enum.lazy.zip([:a, :b, :c]).map(&:last).to_a
=> [:a, :b, :c]
```

Ruby 3:

```
irb(main):020:0> [1, 2, 3].to_enum.lazy.zip([:a, :b, :c]).map(&:last).to_a
(irb):20:in `each': undefined method `last' for 1:Integer (NoMethodError)
```

Debugging the issue, I noticed the following:

Map with a block returns only the first argument (and seems to ignore the zipped list):

```
irb(main):024:0> [1, 2, 3].to_enum.lazy.zip([:a, :b, :c]).map { |x| x }.to_a
=> [1, 2, 3]
```

It's not actually ignored though, it's just passed as a second argument:

```
irb(main):025:0> [1, 2, 3].to_enum.lazy.zip([:a, :b, :c]).map { |*x| x }.to_a
=> [[1, :a], [2, :b], [3, :c]]
```

Thus, this looks like a workaround:

```
irb(main):026:0> [1, 2, 3].to_enum.lazy.zip([:a, :b, :c]).map { |*x| x.last }.to_a
=> [:a, :b, :c]
```

But it behaves differently when leaving the lazy out:

```
irb(main):027:0> [1, 2, 3].to_enum.zip([:a, :b, :c]).map { |*x| x.last }.to_a
=> [[1, :a], [2, :b], [3, :c]]
```

Not sure if I'm correct in my conclusion, but to me it looks like the argument handling of map and lazy_map differs in an unexpected manner. Is this a bug/oversight, or I am simply using the different map implementations wrong?

Associated revisions

Revision a14915ca4baae40f08d288a38b8bfb595500ad90 - 06/24/2023 03:41 PM - jeremyevans (Jeremy Evans)

Do not have Enumerator::Lazy#zip mark result as packed

Fixes [Bug #19569]

Revision a14915ca4baae40f08d288a38b8bfb595500ad90 - 06/24/2023 03:41 PM - jeremyevans (Jeremy Evans)

Do not have Enumerator::Lazy#zip mark result as packed

Fixes [Bug #19569]

Revision a14915ca - 06/24/2023 03:41 PM - jeremyevans (Jeremy Evans)

Do not have Enumerator::Lazy#zip mark result as packed

Fixes [Bug #19569]

History

#1 - 04/03/2023 01:04 PM - TomNaessens (Tom Naessens)

- Subject changed from *#map on Enumerator::Lazy block arguments differ from regular #map to #map on Enumerator::Lazy block arguments seem to differ from regular #map*

#2 - 06/21/2023 05:26 PM - jeremyevans0 (Jeremy Evans)

This is because Enumerator::Lazy#zip marks the enumerator as packed when it shouldn't (introduced with the optimization in [54acb3dd52a5fe75c32c3e36a6984d3ec4314a72](https://github.com/ruby/ruby/pull/7967)). I've submitted a pull request to fix this: <https://github.com/ruby/ruby/pull/7967>

#3 - 06/24/2023 10:20 PM - jeremyevans (Jeremy Evans)

- Status changed from *Open* to *Closed*

Applied in changeset [git|a14915ca4baae40f08d288a38b8bfb595500ad90](https://github.com/ruby/ruby/pull/7967).

Do not have Enumerator::Lazy#zip mark result as packed

Fixes [Bug [#19569](#)]