

CommonRuby - Feature #9023

Array#tail

10/15/2013 01:28 PM - fuadksd (Fuad Saud)

Status:	Assigned
Priority:	Normal
Assignee:	matz (Yukihiro Matsumoto)
Target version:	
Description	
I propose the addition of a tail method to the Array class that returns all elements but the first. It is a pretty common pattern in functional programming, but not limited to - I use it extensively in all kinds of apps/gems. The implementation would be pretty trivial, I won't risk a patch to MRI because I'm uninitiated on ruby core matters, but powerpack gem (http://github.com/bbatsov/powerpack) implements it in ruby in terms of slices.	

History

#1 - 10/15/2013 03:58 PM - nobu (Nobuyoshi Nakada)

How about to extend Array#last (and Array#first too) to accept negative size?

#2 - 10/15/2013 09:37 PM - mame (Yusuke Endoh)

- Status changed from Open to Assigned

- Assignee set to matz (Yukihiro Matsumoto)

FYI:

I made the same proposal in Japanese [ruby-dev:32198]. But matz did not agree with me because "tail" did not look a good name to him. Indeed, it is unnatural that all but "head" is "tail", especially, for those who are not familiar with typed functional programming such as ML and Haskell.

Even for very functional people.

<http://wadler.blogspot.jp/2009/11/list-is-odd-creature.html>

Matz counter-proposed "butfirst" (which comes from LOGO) but received many negative comments, he said. The following names were suggested but matz did not like all of them.

- cdr
- rest
- body
- tail
- subseq
- headless
- follower
- but_first
- subsequence
- from_second
- continuation
- second_or_later

In the end, knu suggested a simple workaround:

```
ary.drop(1)
```

--

Yusuke Endoh mame@tsg.ne.jp

#3 - 10/17/2013 09:34 PM - Anonymous

+1 for #tail. I do not know why it seemed not a good name to Matz, but in case he reads this, I experienced that the notion that "everything but head is tail" is easy to learn and remember.

PS: My second and third favorite is #cdr and #rest. In the meantime, like-minded can enjoy #cdr along with #car, #cadr, #cddr and progeny in my (begging forgiveness for self-promotion) Pyper gem (<https://github.com/boris-s/pyper>).

#4 - 10/20/2013 06:53 PM - funny_falcon (Yura Sokolov)

List (and Array) is a snake : everything but head is tail :)

2013/10/18 Fuad Saud fuadksd@gmail.com

I can understand maybe tail is not the best name to describe this concept, nor any of the other options. But it is still a pretty common idiom among many functional languages.

I like cdr, but it wouldn't make much sense to introduce it in ruby today

- it may confuse newcomers a lot, since that's not very intuitive.

Rest doesn't feel right. What is rest? It's a remainder, but if you drop the last element, then what remains is still a kind of rest :/

Butfirst is weird for me, but bbatsov (powerpack maintainer) preferred it over tail, and it makes it very clear what it means (e.g. people.but_first.each do ... means iterate over people but the first).

#5 - 11/13/2013 06:59 PM - bozhidar (Bozhidar Batsov)

I also dislike the name Array#tail, since it's commonly associated with linked lists, not arrays. I think a much better name would be Array#butfirst (and I've actually renamed Array#tail in powerpack to Array#butfirst). On a related note it makes sense to have a method Array#butlast as well - it should obviously everything except the last element of the array.

#6 - 11/13/2013 09:53 PM - Anonymous

rest sounds definitely better. Clojure uses it and it feels very natural and readable.

On Wed, Nov 13, 2013 at 7:59 AM, bozhidar (Bozhidar Batsov) <bozhidar@batsov.com> wrote:

Issue [#9023](#) has been updated by bozhidar (Bozhidar Batsov).

I also dislike the name Array#tail, since it's commonly associated with linked lists, not arrays. I think a much better name would be Array#butfirst (and I've actually renamed Array#tail in powerpack to Array#butfirst). On a related note it makes sense to have a method Array#butlast as well - it should obviously everything except the last

element of the array.

Feature [#9023](#): Array#tail
<https://bugs.ruby-lang.org/issues/9023#change-42901>

Author: fuadksd (Fuad Saud)
Status: Assigned
Priority: Normal
Assignee: matz (Yukihiro Matsumoto)
Category:
Target version:

I propose the addition of a tail method to the Array class that returns all elements but the first. It is a pretty common pattern in functional programming, but not limited to - I use it extensively in all kinds of apps/gems. The implementation would be pretty trivial, I won't risk a patch to MRI because I'm uninitiated on ruby core matters, but powerpack gem (<http://github.com/bbatsov/powerpack>) implements it in ruby in terms of slices.

--
<http://bugs.ruby-lang.org/>

#7 - 07/26/2016 02:06 PM - Nondv (Dmitry Non)

Bozhidar Batsov wrote:

I also dislike the name Array#tail, since it's commonly associated with linked lists, not arrays.

+1 on that.

Bozhidar Batsov wrote:

I think a much better name would be `Array#butfirst` (and I've actually renamed `Array#tail` in `powerpack` to `Array#butfirst`)

Why do you and Matz not like `#but_first` ? Doesn't that make more sense to split words? `#is_a?`

I knew not much of methods that doesn't split words (actually I can remember only `#upto` and `#downto`)