Ruby master - Feature #16781

alias :fold :reduce

04/12/2020 08:47 PM - 0x81000000 (/ /)

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**Description**

1. Method "collect" has short synonym "map", short synonym of "inject" and "reduce" doesn't exist.
2. Name "fold" is more common/popular than "reduce" or "inject".

In my own code I use:

```ruby
module Enumerable
  alias :fold :reduce
end
```

I have no idea how to properly add "fold" in Ruby's stdlib/corelib.

**History**

#1 - 04/17/2020 06:12 PM - 0x81000000 (/ /)
- Description updated

#2 - 04/18/2020 05:17 PM - shan (Shannon Skipper)
0x81000000 (/ /) wrote:

1. Name "fold" is more common/popular than "reduce" or "inject".

I was surprised to hear this, since I think of "reduce" as most popular. A quick survey of popular languages seems to confirm that "reduce" is most popular, followed by "accumulate."

Reduce:

- JavaScript
- Python
- Java
- PHP
- Ruby
- TypeScript
- Swift

Accumulate:

- C#
- C++

Fold:

Not found

You do also see "fold" in functional languages like Clojure, Scala, Elixir, et cetera, where it has a different meaning than "reduce," which is also present. In any case, "inject" has fallen out of favor.

I have no idea how to properly add "fold" in Ruby's stdlib/corelib.

You could an rb_define_method(rb_mEnumerable, "fold", enum_inject, -1); here: [https://github.com/ruby/ruby/blob/v2_7_1/enumer.c#L4172-L4173](https://github.com/ruby/ruby/blob/v2_7_1/enumer.c#L4172-L4173)
shan (Shannon Skipper) wrote in #note-2:

I was surprised to hear this, since I think of "reduce" as most popular.

https://en.wikipedia.org/wiki/Fold_(higher-order_function)
Article 'Reduce_(higher-order_function)' - just redirect to link above.


C++ STL - bad reference (an example to follow), std::accumulate 4 times slower than for-loop: https://habr.com/ru/company/dbtc/blog/498374/#comment_21542236