

Ruby master - Feature #15976

Add Array#overlap? for whether the intersection of 2 arrays is non empty?

07/02/2019 02:09 PM - fcheung (Frederick Cheung)

Status:	Feedback
Priority:	Normal
Assignee:	
Target version:	
Description	
This is semantically equivalent to <code>(ary1 & ary2).any?</code> , but more efficient and makes the intent more obvious.	
For example bundler checks whether the list of requested groups and the list of groups for a dependency has any overlap - it doesn't care what the overlap is, as long as it is non empty	
In my personal projects we've found this to be a bottleneck when the arrays are large and where intersections are likely - <code>!(ary1 & ary2).empty?</code> keeps searching for all of the intersection even after we've found the first one, & creates extra garbage because of the intermediate array.	
See https://github.com/ruby/ruby/pull/2260	
Related issues:	
Is duplicate of Ruby master - Feature #15198: Array#intersect?	Open

History

#1 - 07/02/2019 03:06 PM - fcheung (Frederick Cheung)

- Subject changed from Add Array#overlaps? for whether the intersection of 2 arrays is non empty? to Add Array#overlap? for whether the intersection of 2 arrays is non empty?

- File 2260.patch added

#2 - 07/02/2019 03:06 PM - fcheung (Frederick Cheung)

- File deleted (2260.patch)

#3 - 07/02/2019 04:12 PM - shevegen (Robert A. Heiler)

To me the name of the method appears to make sense and I am slightly in favour of the suggestion. I can not say how useful this method would be in general, though, mostly because I think I needed to do something such as `(array1 & array2).any?` perhaps only once or twice in a long time in my own code; but even then I think this might be a useful proposal and a name that makes sense (to me at the least).

#4 - 07/02/2019 09:02 PM - fcheung (Frederick Cheung)

- File deleted (2260.patch)

- File 2260.patch added

#5 - 07/02/2019 09:03 PM - fcheung (Frederick Cheung)

- Description updated

#6 - 07/02/2019 09:05 PM - fcheung (Frederick Cheung)

shevegen (Robert A. Heiler) wrote:

To me the name of the method appears to make sense and I am slightly in favour of the suggestion. I can not say how useful this method would be in general, though, mostly because I think I needed to do something such as `(array1 & array2).any?` perhaps only once or twice in a long time in my own code; but even then I think this might be a useful proposal and a name that makes sense (to me at the least).

Thanks. Matz suggested today that the name was not so clear to him. An alternative that springs to mind would be `intersect?`, but I am obviously open to any suggestions

#7 - 07/27/2019 09:13 AM - janosch-x (Janosch Müller)

I think this should be called `intersect?` for consistency with `Set#intersect?` and `SortedSet#intersect?`.

#8 - 09/02/2019 07:02 AM - matz (Yukihiko Matsumoto)

- *Status changed from Open to Feedback*

I don't think `overlap?` is a good name. Besides that, `Array#overlap?` creates an internal hash table anyway, so that it wouldn't solve the bottleneck. In this case, creating a hash table explicitly would perform better.

Matz.

#9 - 09/02/2019 07:04 AM - matz (Yukihiko Matsumoto)

- *Is duplicate of Feature #15198: `Array#intersect?` added*

Files

2260.patch	7.9 KB	07/02/2019	fcheung (Frederick Cheung)
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