

## Ruby master - Feature #17056

### Array#index: Allow specifying the position to start search as in String#index

07/28/2020 11:53 PM - TylerRick (Tyler Rick)

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| <b>Status:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Open   |
| <b>Priority:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Normal |
| <b>Assignee:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |
| <b>Target version:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        |
| <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |
| <p>I have a use case of finding the first matching line within a given section in a file. After finding the line number of the start of the section, I want to find the first match after that line.</p> <p>My workaround for now is to use <code>with_index</code>:</p> <pre>lines = pathname.read.lines section_start_line = lines.index { line  line.start_with?(/* #{section_name}/) } lines.index.with_index { line, i  i &gt; section_start_line &amp;&amp; line.include?(sought) }</pre> <p>I'd like to do it in a more concise way using a feature of <code>Array#index</code> that I propose here, which is analogous to <code>String#index</code>.</p> <p>If the second parameter of <code>String#index</code> is present, it specifies the position in the string to begin the search:</p> <pre>'abcabc'.index('a') # =&gt; 0 'abcabc'.index('a',2) # =&gt; 3</pre> <p>I would expect to also be able to do:</p> <pre>'abcabc'.chars.index('a') # =&gt; 0 'abcabc'.chars.index('a', 2)</pre> <p>Using such feature, I would be able to do:</p> <pre>lines.index(sought, section_start_line)</pre> <p>This would give Ruby better parity with other programming languages like Python:</p> <pre>&gt;&gt;&gt; list('abcabc') ['a', 'b', 'c', 'a', 'b', 'c'] &gt;&gt;&gt; list('abcabc').index('a') 0 &gt;&gt;&gt; list('abcabc').index('a', 2) 3</pre> <h3>End index</h3> <p>We can further think of an optional parameter to specify the position to end the search. The following languages allow specifying both start and end indexes:</p> <ul style="list-style-type: none"><li>• <a href="#">Python</a></li><li>• <a href="#">C#</a></li></ul> <p>Ruby's <code>String#index</code> does not have one, so we could make a separate proposal to add end to both methods at the same time.</p> |        |

### History

#1 - 07/29/2020 12:53 AM - TylerRick (Tyler Rick)

- Description updated

#2 - 07/29/2020 12:56 AM - TylerRick (Tyler Rick)

- Description updated

**#3 - 07/31/2020 10:08 AM - sawa (Tsuyoshi Sawada)**

- Description updated

- Subject changed from `Array#index: Allow specifying start index to search like String#index does to Array#index: Allow specifying the position to start search as in String#index`

**#4 - 08/24/2020 01:28 PM - marcandre (Marc-Andre Lafortune)**

☐☐

I'd like to have optional start and stop arguments for `find_index`, `find`, `bsearch` and `bsearch_index`.

As mentioned, a typical usecase is to repeat a lookup, but another one is to lookup a range of indices (e.g. which elements of a sorted array are between 10 and 20).

I've had to [iterate on the indices instead](#) but it is not elegant and is less performant.

**#5 - 08/30/2020 11:28 PM - fatkodima (Dima Fatko)**

I have implemented an offset parameter for `Array#index` - <https://github.com/ruby/ruby/pull/3448>  
Will adjust to more methods if asked.