

Ruby master - Bug #6680

Unclear rdoc for Array and String slicing

07/01/2012 07:27 AM - stomar (Marcus Stollsteimer)

Status: Closed	
Priority: Normal	
Assignee: drbrain (Eric Hodel)	
Target version: 2.0.0	
ruby -v: ruby 1.9.3p243 (2012-06-28 revision 36244) [i686-linux]	Backport:
Description =begin Slicing of arrays and strings specifying start/length or using a range is not documented well, and often leads to confusion, see for example http://stackoverflow.com/questions/3568222/array-slicing-in-ruby-looking-for-explanation-for-illogical-behaviour-taken-fr or http://www.ruby-forum.com/topic/1393096#990065 The attached patch tries to clarify the documentation. =end	

Associated revisions

Revision ab63d24b - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@36298 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision 36298 - 07/03/2012 11:29 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
- array.c (rb_ary_aset): ditto.
- string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

Revision cd0971e2 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@36328 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

Revision 36328 - 07/05/2012 09:50 PM - drbrain (Eric Hodel)

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

History

#1 - 07/01/2012 11:58 AM - drbrain (Eric Hodel)

- Assignee set to drbrain (Eric Hodel)

- Target version set to 2.0.0

- Category set to doc

#2 - 07/04/2012 08:29 AM - drbrain (Eric Hodel)

- Status changed from Open to Closed

- % Done changed from 0 to 100

This issue was solved with changeset r36298.

Marcus, thank you for reporting this issue.

Your contribution to Ruby is greatly appreciated.

May Ruby be with you.

-
- array.c (rb_ary_aref): Updated documentation to indicate the starting index is an index into the array or string. Updated examples to show behavior of indexes at the end of an array or string. Based on patch by Marcus Stollsteimer. [Bug #6680]
 - array.c (rb_ary_aset): ditto.
 - string.c (rb_str_aref): ditto. Also added descriptive argument names to call-seq section.

#3 - 07/04/2012 08:35 AM - drbrain (Eric Hodel)

I chose to indicate that the start offset is an index instead of your text, but I kept your examples since the behavior isn't documented.

#4 - 07/04/2012 09:38 PM - stomar (Marcus Stollsteimer)

- File rdoc_for_array_and_string_slice_2_v1.patch added

- File rdoc_for_array_and_string_slice_2_v2.patch added

Hi Eric,

thank you, there are definitely some improvements here.

But: in my opinion the documentation is still unsatisfactory. Having the examples surely helps in making clear that the behavior is desired, but there is still no explanation.

The discussions I linked to in the original bug report show that people are puzzled by the seemingly illogical behavior, specifically that the same index value sometimes does lie in the valid range and sometimes does not:

```
a = [1, 2, 3, 4]
a[4]      #=> nil
a[4, 1]   #=>
```

Providing a consistent explanation really would help.

I attached two alternative suggestions for consideration.

Regards,
Marcus

#5 - 07/04/2012 11:51 PM - stomar (Marcus Stollsteimer)

- File typo_in_rdoc_for_array_and_string_slice.patch added

Hi Eric,

there is a typo in the new examples, see new patch:

in the "special cases", a₆ should be a[6, 1], to show the difference between a[a.size, length], which is a valid range, and a[a.size + 1, length], which is not in valid range.

#6 - 07/06/2012 05:42 AM - drbrain (Eric Hodel)

- Status changed from Closed to Assigned

#7 - 07/06/2012 06:50 AM - drbrain (Eric Hodel)

- Status changed from Assigned to Closed

This issue was solved with changeset r36328.

Marcus, thank you for reporting this issue.

Your contribution to Ruby is greatly appreciated.

May Ruby be with you.

- array.c (rb_ary_aref): Added a description of the behavior of index positioning. [Bug #6680]
- array.c (rb_ary_aset): ditto. Reordered sentences for clarity.
- string.c (rb_str_aref_m): Added a description of the behavior of index positioning

#8 - 07/06/2012 06:54 AM - drbrain (Eric Hodel)

I incorporated the ideas of your two patches which seem to help clarify things. Let me know if this latest patch needs further adjustment.

Files

rdoc_for_array_and_string_slice.patch	2.83 KB	07/01/2012	stomar (Marcus Stollsteimer)
rdoc_for_array_and_string_slice_2_v1.patch	2.02 KB	07/04/2012	stomar (Marcus Stollsteimer)
rdoc_for_array_and_string_slice_2_v2.patch	2.02 KB	07/04/2012	stomar (Marcus Stollsteimer)
typo_in_rdoc_for_array_and_string_slice.patch	435 Bytes	07/04/2012	stomar (Marcus Stollsteimer)