Ruby master - Feature #4907

enumerable#permutation and combination

06/20/2011 11:06 AM - neleai (Ondrej Bilka)

<table>
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<th>Status:</th>
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<td>Priority:</td>
<td>Normal</td>
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<td>Assignee:</td>
<td>mrkn (Kenta Murata)</td>
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**Description**

Hello

Methods permutation and combination are defined for array but it makes more sense to define them for enumerable. Here is sample implementation which for simplicity works only with blocks.

Note that implementation works lazily.

It changes traversal order but documentation states that order is unspecified.

```ruby
module Enumerable
  def perm(n)
    comb(n){|ary|
      ary.permutation{|p| yield(p)}
    }
  end
  def comb(n,&m)
    ary=[]
    e=to_enum.with_index
    _comb(e,n-1,1.0/0.0,ary,m)
  end
  def _comb(e,n,bound,ary,m)
    e.each{|el,i|
      return if i>=bound
      ary[n]=el
      if n==0
        m.call(ary)
      else
        _comb(e,n-1,i,ary,m)
      end
    }
  end
end
```

```
[1,2,4,3,5].comb(2){|a| puts a.inspect}
(1..4).comb(2){|a| puts a.inspect}
(1..4).perm(2){|a| puts a.inspect}
```

**History**

**#1 - 03/25/2012 04:25 PM - mame (Yusuke Endoh)**

- Status changed from Open to Assigned
- Assignee set to mrkn (Kenta Murata)

**#2 - 11/20/2012 09:40 PM - mame (Yusuke Endoh)**

- Priority changed from Normal to 3
- Target version set to 2.6

This will not work for an enumerator created from IO.

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**#3 - 12/25/2017 06:15 PM - naruse (Yui NARUSE)**

- Target version deleted (2.6)
#4 - 03/08/2018 09:26 AM - mrkn (Kenta Murata)
- Status changed from Assigned to Closed

No use case is shown, so I close this issue.

#5 - 03/08/2018 09:27 AM - mrkn (Kenta Murata)
- Status changed from Closed to Rejected