

### Sorting

```
^before = [3,6,3,0,8,235,-3]
after = before.sort
before # => [3, 6, 3, 0, 8, 235, -3]
after # => [-3, 0, 3, 3, 6, 8, 235]^
```

### Arrays - Initializing

```
[1, 2, 3] # => [1, 2, 3]
Array.new(2) # => [nil, nil]
Array.new(5) { |i| i * 5 } # => [0, 5, 10, 15, 20]
Array.new(2) { Array.new(2) } # => [[nil, nil], [nil, nil]]
ary = [] # => []
ary = Array.new # => []
```

**# initializing array of strings on whitespace**

```
%w(this that, and the other)
# => ["this", "that,", "and", "the", "other"]
```

### Accessing and Assigning

```
ary = %w(ruby python perl php javascript c)
ary[0] # => "ruby"
ary[1] # => "python"
ary[2] # => "perl"
ary[3] # => "php"
ary[4] = 'ecmascript'
ary # => ["ruby", "python", "perl", "php", "ecmascript", "c"]
```

**# negative indexes are applied from the end**

```
ary[-1] # => "c"
ary[-2] # => "ecmascript"
ary[-3] # => "php"
```

**# first and last**

```
ary.first # => "ruby"
ary.last # => "c"
```

**# subarrays give a range, or a start index and length**

```
ary # => ["ruby", "python", "perl", "php", "ecmascript", "c"]
ary[0..2] # => ["ruby", "python", "perl"]
ary[-3..-1] # => ["php", "ecmascript", "c"]
ary[2, 3] # => ["perl", "php", "ecmascript"]
```

**# can replace a range of indexes with elements from an array (size doesn't need to match)**

### Accessing and Assigning (cont)

```
ary # => ["ruby", "python", "perl", "php", "ecmascript", "c"]
ary[1..2] = [9,8,7,6,5,4,3,2,1]
ary # => ["ruby",9,8,7,6,5,4,3,2,1,"php","ecmascript", "c"]
ary = Array(0..10) # => [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
ary.insert(5,'five')
ary # => [0, 1, 2, 3, 4, "five", 5, 6, 7, 8, 9, 10]
```