Working with Arrays (1)

Make sure you have your text editor and terminal open, or use BBEdit.

Exercise 3.1

In the Array [1, 2, 3, 4, 5], what’s the index of the number 4?

3

Exercise 3.2

In irb, how can you ask the Array, and check if your previous answer was correct?

puts numbers[4]

Exercise 3.3

In irb, how can you ask the Array for the number of elements it contains?

puts numbers.count

Exercise 3.1

Create a new, empty file. Save it as arrays\_1-1.rb. Fill in the following line:

numbers **=** [1, 2, 3, 4, 5, 6]

*# your code goes here*

… so that, when you run your code (run ruby arrays\_1-1.rb), you get the following output:

5

numbers = [1, 2, 3, 4, 5, 6]  
puts numbers[4]

Exercise 3.2

Copy your file to a new file: cp arrays\_1-1.rb arrays\_1-2.rb, then open this new file.

Add another line *before the line that you just added*, so that, when you run your code, you get the following output:

99

numbers = [1, 2, 3, 4, 5, 6]  
numbers[4] = 99  
puts numbers[4]

Exercise 3.3

Make a new file arrays\_1-3.rb, and fill in the following line:

numbers **=** [1, 2, 3, 4, 5, 6]

*# your code goes here*

p numbers

… so that you get the following output:

[2, 4, 6]

You know how to get the individual numbers. And you know that you can list things separated by comma, and enclosed with square brackets in order to get a new Array. Try combining this, and “listing” the code that gets a number from the array.

[Show solution](http://ruby-for-beginners.rubymonstas.org/solutions_2/arrays_1-6.html)

numbers = [1, 2, 3, 4, 5, 6]  
numbers = [numbers[1], numbers[3], numbers[5]]  
p numbers

Exercise 3.4

Again, copy your last file to a new file: cp arrays\_1-3.rb arrays\_1-4.rb, then open this new file.

Now add *another* line after the one that you just added (i.e. before you finally output the array using p).

Try to figure out how to transform your Array so you get the following output:

[6, 4, 2]

Before you do anything else, try describing the problem in English. What verb do you use to describe this transformation?

Look through the methods listed on the left side of the [documentation for Arrays](http://ruby-doc.org/core-2.1.5/Array.html). to see if any of these describes what you’re looking for.

[Show solution](http://ruby-for-beginners.rubymonstas.org/solutions_2/arrays_1-7.html)

numbers = [1, 2, 3, 4, 5, 6]

numbers = [numbers[1], numbers[3], numbers[5]]

numbers = numbers.reverse

p numbers