This proposal is part of the search for how pattern matching or its elements could be gently introduced to Ruby. This blog post (authored by me) provides context and "full" (more powerful than the current proposal, but more questionable also) idea, but I believe that this, more moderate, extension, could be a reasonable start.

Proposal:

Allow matching several values at once, when matching by case.

Example:

```ruby
case (x, y)
  when (0..10, 0..10)
    ...
  when (Array, nil) # coordinates were passed as an array in first argument
    ...
  when (Numeric, nil), (nil, Numeric) # somehow one of coordinates were missing
    ...
```

Justification:

- The syntax change is minimal (no new keywords/special chars), yet visible (very little possibility of hidden incompatibilities)
- It is alike deconstruction when passing arguments to methods or blocks
- It allows gradual adding of more features in the future versions of Ruby once the new syntax will become familiar:

```ruby
when (*Numeric) # match only an array of numerics
  ...
when (_, Array) # skip any
  ...
when (Numeric, Numeric => y, Hash => options) # match & assign, like in rescue
  ...
```

Links:

- Blog post with reasons, links to previous discussions and more examples
- Experimental gem to try as much of new proposals as possible to imitate in the current Ruby version.

PS:

Alternative syntax (reusing "block arguments" sign):

```ruby
case |x, y|
  when |0..10, 0..10|
    ...
  when |Array, nil|
    ...
  when |Numeric, nil|, |nil, Numeric| # OK, that's probably weird
    ...
```

Related issues:

Related to Ruby master - Feature #14916: Proposal to add Array#===

History

#1 - 07/15/2018 04:35 PM - shevegen (Robert A. Heiler)
I don't have a big pro or con opinion on the functionality itself.

However had, for the alternative syntax of:

```ruby
case |x, y|
```

I think it is too reminiscent of block syntax style such as:

```ruby
object.each { |x, y|
```

I would rather prefer to keep it simpler and not have this syntax for case/when structures.

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#2 - 07/17/2018 09:00 AM - sawa (Tsuyoshi Sawada)

Perhaps, you can redefine Array#=== and use arrays in the following way:

```ruby
case [x, y]
  when [0..10, 0..10]
    ...
  when [Array, nil]
    ...
  when [Numeric, nil], [nil, Numeric]
    ...
end
```

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#3 - 07/18/2018 07:14 AM - mrkn (Kenta Murata)

- Related to Feature #14912: Introduce pattern matching syntax added

#4 - 07/18/2018 07:31 AM - shyouhei (Shyouhei Urabe)

- Related to deleted (Feature #14912: Introduce pattern matching syntax)

#5 - 07/18/2018 07:33 AM - matz (Yukihiro Matsumoto)

- Status changed from Open to Closed

We will discuss the pattern matching in #14912.

Matz.

#6 - 07/19/2018 12:13 AM - mrkn (Kenta Murata)

- Related to Feature #14916: Proposal to add Array#=== added