Quiz 9

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1. Make `Trees` iterable! What methods do we need to implement?

```
class Tree:
    def __init__(self, root, branches=[]):
        self.root = root
        for branch in branches:
            assert isinstance(branch, Tree)
        self.branches = list(branches)

    def is_leaf(self):
        return not self.branches
```

2. Define a generator that yields the values from a `Tree` in a different order.

3. What are the first four values of the stream `s`?

```
(define (sweet dreams)
  (cons-stream (list dreams) (sweet (list dreams))))

(define (mix tape)
  (cons-stream
    (car (car tape))
    (mix (append (match cdr-stream (cdr tape))
                 (list (cdr-stream (car tape)))))))

(define (match dot com)
  (if (null? com) nil
      (cons (dot (car com)) (match dot (cdr com)))))

(define s (mix (match sweet '(1 2 3))))
```