

INSTRUCTIONS

- You have 5 minutes to complete this quiz.
- The exam is closed book, closed notes, closed computer, closed calculator.
- Mark your answers **on the exam itself**. We will *not* grade answers written on scratch paper.
- For multiple choice questions, fill in each option or choice completely.
  - means mark **all options** that apply
  - means mark a **single choice**

Last name	
First name	
Student ID number	
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Discussion Section	_____
<i>All the work on this exam is my own.</i> <b>(please sign)</b>	

0. **Your thoughts?** If Cal's mascot was a turkey, what would be its name?

## 1. Tree Time

Fill in the square to the left of each line if *removing the line* would help pass the doctests. In the space to the right, briefly describe why each line should be removed. *Remove as many lines as possible.*

*Recall:* The special method `__iter__` is called by the built-in `iter()` and should return an iterator.

`IterableTree.__iter__` is a generator that yields the root value of the tree and then each value in its branches.

```
class Tree:
    def __init__(self, label, branches=()):
        self.label = label
        self.branches = list(branches)

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

- class IterableTree:
- class IterableTree(Tree):
- def \_\_init\_\_(self, label, branches=()):
- Tree.\_\_init\_\_(label, branches)
- Tree.\_\_init\_\_(self, label, branches)
- def \_\_iter\_\_(self):
 

```
        """Yield the entries of this tree.

        >>> T = IterableTree
        >>> t = T('A', [T(2, [T('C'),
        ...           T(4)]),
        ...           T('E', [T(6)])])
        >>> list(t)
        ['A', 2, 'C', 4, 'E', 6]
        """
```
- yield self.label
- yield label
- for branch in self.branches:
- branch = iter(branch)
- for label in branch:
- for label in branch():
- yield self.label
- yield label
- yield self.label
- yield label