Linked Lists

Recursive Lists Can Change
Attribute assignment statements can change first and rest attributes of a Link.
The rest of a linked list can contain the linked list as a sub-list.

Go Bears!

Land Owners

Instances attributes are found before class attributes; class attributes are inherited.

```
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Trees

**Morse Code**

Morse code is a signaling protocol that transmits messages by sequences of signals.

**Problem:** Implement `morse` so that `decode` works correctly.

```python
code = {'a': '.-', 'b': '-...', 'c': '-.-.', 'd': '-..', 'e': '.'}
def decode(signals, tree):
    """Decode signals into a letter."
    tree = [b for b in tree.branches if b.label == signal]
    for signal in signals:
        tree = [b for b in tree.branches if b.label == signal]
leaves = [b for b in tree.branches if b.is_leaf()]
assert len(leaves) == 1
return leaves[0].label

def morse(code):
    ...?

print(morse(code))
```

(Demo)