


On Thursday, February 16th at 6:00AM EST, UTC-5, we will be conducting a brief database maintenance. The event should last about 5 minutes.



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Exercise 4

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Exercise 4

1/1 point (graded)

ESTIMATED TIME TO COMPLETE: 4 minutes

Consider the following function definition:

```
def union(set1, set2):
    """
    set1 and set2 are collections of objects, each of which
    might be empty.
    Each set has no duplicates within itself, but there may be
    objects that
    are in both sets. Objects are assumed to be of the same
    type.

    This function returns one set containing all elements from
    both input sets, but with no duplicates.
    """
    if len(set1) == 0:
        return set2
    elif set1[0] in set2:
        return union(set1[1:], set2)
    else:
        return set1[0] + union(set1[1:], set2)
```

Assume that `union` is called with strings as arguments.

Please select the best glass box test suite for the function `union` from the following options:

- ☐ Test Suite A: `union('', '')`, `union('', 'a')`, `union('', 'ab')`,
`union('a', '')`, `union('a', 'b')`, `union('c', 'ab')`,
`union('de', '')`, `union('ab', 'c')`, `union('cd', 'ab')`

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☐ Test Suite B: `union('abc', '')`, `union('abc', 'a')`,
`union('abc', 'ab')`, `union('abc', 'd')`,
`union('abc', 'abcd')`

☐ Test Suite C: `union('', 'abc')`, `union('a', 'abc')`,
`union('ab', 'abc')`, `union('abc', 'abc')`

☒ Test Suite D: `union('', 'abc')`, `union('a', 'abc')`,
`union('ab', 'abc')`, `union('d', 'abc')` ✓

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✓ Correct (1/1 point)

Exercise 4

Topic: Lecture 7 / Exercise 4

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