

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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7. Testing and Debugging

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Problem Set 4

Week 4: Good Programming Practices > 7. Testing and Debugging > Exercise 4

Exercise 4

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Exercise 4

1 point possible (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:

Problem Set due Feb
23, 2017 15:30 PST 

- ▶ [Midterm Exam](#)
- ▶ [Week 5: Object Oriented Programming](#)
- ▶ [Sandbox](#)

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

☐ 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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Exercise 4

Topic: Lecture 7 / Exercise 4

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