

Problem 7

20.0/20.0 points (graded)

You are given the following superclass. Do not modify this.

```
class Container(object):
    """ Holds hashable objects. Objects may occur 0 or more times """
    def __init__(self):
        """ Creates a new container with no objects in it. I.e., any
object
        occurs 0 times in self. """
        self.vals = {}
    def insert(self, e):
        """ assumes e is hashable
        Increases the number times e occurs in self by 1. """
        try:
            self.vals[e] += 1
        except:
            self.vals[e] = 1
    def __str__(self):
        s = ""
        for i in sorted(self.vals.keys()):
            if self.vals[i] != 0:
                s += str(i)+":"+str(self.vals[i])+"\n"
        return s
```

Write a class that implements the specifications below. Do not override any methods of Container.

```
class Bag(Container):
    def remove(self, e):
        """ assumes e is hashable
            If e occurs in self, reduces the number of
            times it occurs in self by 1. Otherwise does nothing. """
        # write code here

    def count(self, e):
        """ assumes e is hashable
            Returns the number of times e occurs in self. """
        # write code here
```

- For example,

```
d1 = Bag()
d1.insert(4)
d1.insert(4)
print(d1)
d1.remove(2)
print(d1)
```

prints

```
4:2
4:2
```

- For example,

```
d1 = Bag()
d1.insert(4)
d1.insert(4)
d1.insert(4)
print(d1.count(2))
print(d1.count(4))
```

prints

```
0
3
```

Paste your entire class in the box below. Do not leave any debugging print statements.

```
1 class Bag(Container):
2     def remove(self, e):
3         """ assumes e is hashable
4             If e occurs in self, reduces the number of
5             times it occurs in self by 1. Otherwise does nothing. """
6         try:
7             self.vals[e] -= 1
8         except:
9             pass
10
11
12     def count(self, e):
13         self.counter = 0
14         """ assumes e is hashable
15             Returns the number of times e occurs in self. """
```

Press ESC then TAB or click outside of the code editor to exit

Correct

Test results

CORRECT

[See full output](#)

[See full output](#)

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You have used 1 of 10
attempts