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Exercise: coordinate

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Exercise: coordinate

5.0/5.0 points (graded)

ESTIMATED TIME TO COMPLETE: 7 minutes

Consider the following code from the last lecture video:

```
class Coordinate(object):
    def __init__(self, x, y):
        self.x = x
        self.y = y

    def getX(self):
        # Getter method for a Coordinate object's x coordinate.
        # Getter methods are better practice than just accessing an attribute directly
        return self.x

    def getY(self):
        # Getter method for a Coordinate object's y coordinate
        return self.y

    def __str__(self):
        return '<' + str(self.getX()) + ',' + str(self.getY()) + '>'
```

Your task is to define the following two methods for the `Coordinate` class:

1. Add an `__eq__` method that returns True if coordinates refer to same point in the plane (i.e., have the same x and y coordinate).
2. Define `__repr__`, a special method that returns a string that looks like a valid Python expression that could be used to recreate an object with the same value. In other words, `eval(repr(c)) == c` given the definition of `__eq__` from part 1.

For more on `__repr__`, see [this SO post](#).

```
1 class Coordinate(object):
2     def __init__(self,x,y):
3         self.x = x
4         self.y = y
5
6     def getX(self):
7         # Getter method for a Coordinate object's x coordinate.
8         # Getter methods are better practice than just accessing an attribute directly
9         return self.x
10
11     def getY(self):
12         # Getter method for a Coordinate object's y coordinate
13         return self.y
14
15     def __str__(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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<div><div>confused with the 2nd question</div><div>I couldn't understand the 2nd question. Is <code>__repr__</code> override an operation like <code>__eq__</code> does? what is <code>eval()</code>, is it a built-in function ? con...</div></div>	4
<div><div>spoiler code - Eq method</div><div>Hi there - so my code does return true, but if the Coordinates are not equal it returns none instead of False. Is this something particu...</div></div>	5
<div><div>where can we learn more about <code>__</code> methods ?(<code>__eq__</code>, <code>__str__</code>).</div><div>I am trying a code like below <code>class Coordinate(object): def __init__(self,x,y): self.x = x self.y = y def getX(self): # Getter method for a ...</code></div></div>	2
<div><div>Getters</div><div>I'm a little fuzzy on what the importance of these getter functions are. Why is it better to use <code>self.getX()</code> as opposed to <code>self.x</code>?</div></div>	3
<div><div>Using repr</div><div>I see that the grader uses the repr function by <code>print(repr(c1))</code>, which I wasn't expecting. I would've thought it would be <code>c1.__repr__()</code>?</div></div>	3
<div><div>"," gives error "," did not (note the space after the comma)</div><div>If my solution returned <code>Coordinate(13, 5)</code> the grader gives an error, while when I removed the space after the comma in my solution: ...</div></div>	3



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