# Exercise: coordinate

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## Exercise: coordinate

5.0 points possible (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
```

```
        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):
```

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