Bookmarks

- Welcome to the edX Platform
- Entrance Survey
- Download Python and Get Motivated!
- Week 1: Python Basics
- Week 2: Simple Programs
- Week 3: Structured Types
- Week 4: Good Programming Practices
- Midterm Exam
- Week 5: Object Oriented Programming

Exercise: coordinate

Bookmark this page

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,

9. Classes and Inheritance
Finger Exercises

10. An Extended Example
Finger Exercises

Problem Set 5
Problem Set due Mar 2, 2017 15:30 PST

- Week 6: Algorithmic Complexity
- Sandbox

`eval(repr(c)) == c` given the definition of `__eq__` from part 1.

For more on `__repr__`, see this SO post.

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

    def getX(self):
        # Getter method for a Coordinate object's x coordinat
        # Getter methods are better practice than just access
        return self.x

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

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

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

Unanswered

Submit

Exercise: coordinate

Topic: Lecture 9 / Exercise: coordinate

Show Discussion

© All Rights Reserved

© 2012-2017 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

POWERED BY OPENedX

Download on the App Store

ANDROID APP ON Google play