Python course materials

# Object Oriented Programming

## Homework Assignment

#### Problem 1

Fill in the Line class methods to accept coordinates as a pair of tuples and return the slope and distance of the line.

class Line:  
   
 def \_\_init\_\_(self,coor1,coor2):  
 pass  
   
 def distance(self):  
 pass  
   
 def slope(self):  
 pass

# EXAMPLE OUTPUT  
  
coordinate1 = (3,2)  
coordinate2 = (8,10)  
  
li = Line(coordinate1,coordinate2)

li.distance()

9.433981132056603

li.slope()

1.6

#### Problem 2

Fill in the class

class Cylinder:  
   
 def \_\_init\_\_(self,height=1,radius=1):  
 pass  
   
 def volume(self):  
 pass  
   
 def surface\_area(self):  
 pass

# EXAMPLE OUTPUT  
c = Cylinder(2,3)

c.volume()

56.52

c.surface\_area()

94.2