

```
In [2]: 1 class Line:
2
3     def __init__(self,coor1,coor2):
4         self.coor1 = coor1
5         self.coor2 = coor2
6
7     def distance(self):
8         x1,y1 = self.coor1
9         x2,y2 = self.coor2
10        return ((x2-x1) ** 2 + (y2-y1)**2)**0.5
11
12    def slope(self):
13        x1,y1 = self.coor1
14        x2,y2 = self.coor2
15        return (y2-y1) / (x2 - x1)
```

```
In [3]: 1 coor1 = (3,2)
2 coor2 = (8,10)
3
4 li = Line(coor1,coor2)
```

```
In [4]: 1 li.distance()
```

Out[4]: 9.433981132056603

```
In [5]: 1 li.slope()
```

Out[5]: 1.6

```
In [6]: 1 class Cylinder:
2
3     def __init__(self,height=1,radius=1):
4         self.height = height
5         self.radius = radius
6
7
8     def volume(self):
9         return (self.radius * self.radius * 3.14 * self.height)
10
11    def surface_area(self):
12        return (self.radius * 3.14 * 2 * (self.height + self.radius))
```

```
In [7]: 1 c = Cylinder(2,3)
```

```
In [8]: 1 c.volume()
```

Out[8]: 56.52

```
In [9]: 1 c.surface_area()
```

```
Out[9]: 94.2
```

```
In [ ]: 1
```

```
In [ ]: 1
```

```
In [62]: 1 class Account:
2         def __init__(self,owner,balance=0):
3             self.owner = owner
4             self.balance = balance
5         def __str__(self):
6             return (f"Account owner : {self.owner } \nAccount balance: {self.bal
7         def deposit(self,deposit_amount):
8             self.balance += deposit_amount
9             print("deposit Accepted")
10        def withdraw(self,withdrawl_amount):
11            if self.balance >= withdrawl_amount :
12                self.balance -= withdrawl_amount
13                print("withdrawl accepted")
14            else:
15                print("Not Sufficient funds")
```

```
In [63]: 1 acct1 = Account('Jose',100)
```

```
In [64]: 1 print(acct1)
```

```
Account owner : Jose
Account balance: 100
```

```
In [65]: 1 acct1.owner
```

```
Out[65]: 'Jose'
```

```
acct1.balance
```

```
In [66]: 1 acct1.balance
```

```
Out[66]: 100
```

```
In [67]: 1 acct1.deposit(50)
```

```
deposit Accepted
```

```
In [70]: 1 acct1.withdraw(75)
```

```
withdrawl accepted
```

In [71]: 1 acct1.withdraw(500)

Not Sufficient funds

In [ ]: 1