

Brandon London

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10/23/19

Project 4

```
1 class Product:
2     def __init__(self, name, price, discountPercent):
3         self.__name = name
4         self.__price = price
5         self.__discountPercent = discountPercent
6     def getDiscountAmount(self):
7         return self.__price * self.__discountPercent
8     def getDiscountPrice(self):
9         return self.__price - self.getDiscountAmount()
10    def printDescription(self):
11        return "Name: " + self.__name + ", Price: " + str(self.__price) + ", Discount Percent: " + str(
            self.__discountPercent) + ", Discount Amount: " + str(self.getDiscountAmount()) + ",
            discountPrice: " + str(self.getDiscountPrice())
12 class Book(Product):
13     def __init__(self, author, name, price, discountPercent):
14         self.__author = author
15         Product.__init__(self, name, price, discountPercent)
16     def printDescription(self):
17         return "author: " + self.__author + ", " + Product.printDescription(self)
18 class Movie(Product):
19     def __init__(self, year, name, price, discountPercent):
20         self.__year = year
21         Product.__init__(self, name, price, discountPercent)
22     def printDescription(self):
23         return "Year: " + str(self.__year) + ", " + Product.printDescription(self)
24
25 product = Product("Yeet", 10, 0.1)
26 book = Book("Brandon London", "Yeeted", 12, 0.5)
27 movie = Movie(2019, "Yeeter", 100, 0.2)
28
29 print(product.printDescription())
30 print(book.printDescription())
31 print(movie.printDescription())
```

```
Name: Yeet, Price: 10, Discount Percent: 0.1, Discount Amount: 1.0, discountPrice
: 9.0
author: Brandon London, Name: Yeeted, Price: 12, Discount Percent: 0.5, Discount
Amount: 6.0, discountPrice: 6.0
Year: 2019, Name: Yeeter, Price: 100, Discount Percent: 0.2, Discount Amount: 20.
0, discountPrice: 80.0
>
```

Code :

```
class Product:
    def __init__(self, name, price, discountPercent):
        self.__name = name
        self.__price = price
        self.__discountPercent = discountPercent
    def getDiscountAmount(self):
        return self.__price * self.__discountPercent
    def getDiscountPrice(self):
        return self.__price - self.getDiscountAmount()
    def printDescription(self):
        return "Name: " + self.__name + ", Price: " + str(self.__price) +
", Discount Percent: " + str(self.__discountPercent) + ", Discount Amount:
" + str(self.getDiscountAmount()) + ", discountPrice: " +
str(self.getDiscountPrice())
class Book(Product):
    def __init__(self, author, name, price, discountPercent):
        self.__author = author
        Product.__init__(self, name, price, discountPercent)
    def printDescription(self):
        return "author: " + self.__author + ", " +
Product.printDescription(self)
class Movie(Product):
    def __init__(self, year, name, price, discountPercent):
        self.__year = year
        Product.__init__(self, name, price, discountPercent)
    def printDescription(self):
        return "Year: " + str(self.__year) + ", " +
Product.printDescription(self)

product = Product("Yeet", 10, 0.1)
book = Book("Brandon London", "Yeeted", 12, 0.5)
movie = Movie (2019, "Yeeter", 100, 0.2)

print(product.printDescription())
print(book.printDescription())
print(movie.printDescription())
```