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In [1]: class Chair:
    def __init__(self, num_legs, material, color):
        self.num_legs = num_legs
        self.material = material
        self.color = color
    def describe(self):
        print(f"A {self.color} {self.material} chair with {self.num_legs} legs")

chair1= Chair(4, "wood", "brown")
chair1= Chair(3, "Plastic", "White")
chair1.describe()
```

A White Plastic chair with 3 legs

```
In [93]: import numpy as np
class Student:
    def __init__(self, name, age, marks):
        self.name= name
        self.age= age
        self.marks= marks

    def avg_marks(self):
        average= sum(self.marks) / len(self.marks)
        return average

    def passed(self):
        average= self.avg_marks()
        if average > 50:
            return True
        else:
            return False

student1= Student("Israr Ahmed", 20, np.array([9,12,17,20,16]))
student1.avg_marks()
```

Out[93]: 14.8

```
In [95]: class BankAccount:
    def __init__(self,owner, balance):
        self.owner= owner
        self.balance= balance

    def deposit(self, amount):
        self.balance += amount

    def withdraw(self, amount):
        self.balance -= amount

    def get_balance(self):
        return self.balance

bank1= BankAccount("Israr Ahmed", 1000)
bank1.deposit(5000)
```

```
bank1.withdraw(1000)
bank1.get_balance()
```

Out[95]: 5000

```
In [77]: class ShoppingCart:
        def __init__(self):
            self.items = {}
        def add_items(self, name, price):
            self.items[name] = price
        def remove_items(self, name):
            self.items.pop(name)
        def get_total(self):
            return sum(self.items.values())
```

```
In [89]: item1= ShoppingCart()
        item1.add_items("Surf Excel",100)
        item1.add_items("Bonus", 500)
        item1.remove_items("Bonus")
        item1.items
        item1.get_total()
```

Out[89]: 100

In []: