

#PROBLEM--1

class Camera:

def __init__(self, quality, resolution):

self.quality = quality

self.resolution = resolution

def cam_info(self):

print(f"Quality: {self.quality}\nResolution: {self.resolution}")

class Phone:

def __init__(self, phone_no):

self.phone_no = phone_no

def display(self):

print(f"Phone Number: {self.phone_no}")

class Smartphone(Camera, Phone):

def __init__(self, quality, resolution, phone_no, model, brand):

Camera.__init__(self, quality, resolution)

Phone.__init__(self, phone_no)

self.model = model

self.brand = brand

def show(self):

self.cam_info()

self.display()

print(f"Model: {self.model}\nBrand: {self.brand}")

s = Smartphone("48 MP", "4K", "220838271", "iPhone Pro Max", "Apple")

s.show()

#PROBLEM--2

class Student:

def __init__(self, name, course):

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self.name=name  
self.course=course
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def stu_Info(self):  
    print("Student Name:",self.name)  
    print("Course:",self.course)
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class StudentAthelete(Student):  
    def __init__(self,name,course,sports):  
        Student.__init__(self,name,course)  
        self.sports=sports  
  
    def display(self):  
        self.stu_Info()  
        print("Sports :",self.sports)  
s=StudentAthelete("Preethi","Artificial Intelligence","Tennis")  
s.display()
```