**济 源 职 业 技 术 学 院**

**面向对象应用**

**适用班级：信工**

**设计一个汽车租赁系统，分别写一个汽车父类，三个子类分别是卡车类，公共汽车类，小汽车类，一个汽车管理类，一个测试类来实现**

*"""  
 设计一个汽车租赁系统，分别写一个汽车父类，三个子类分别是卡车类，公共汽车类，小汽车类，一个汽车管理类，一个测试类来实现  
"""*# 父类  
class MotoVehicle*(*object*)*:  
 def \_\_init\_\_*(*self,number,brand,dayPrice*)*:  
 self.number = number # 车牌号  
 self.brand = brand # 车型  
 self.dayPrice = dayPrice # 日租金  
 def getNumber*(*self*)*:  
 return self.number  
 def setNumber*(*self,number*)*:  
 self.number = number  
 def getBrand*(*self*)*:  
 return self.brand  
 def setBrand*(*self,brand*)*:  
 self.brand = brand  
 def getDayPrice*(*self*)*:  
 return self.dayPrice  
 def setDayPrice*(*self,dayPrice*)*:  
 self.dayPrice = dayPrice  
  
# 小汽车类  
class Car*(*object*)*:  
 def \_\_init\_\_*(*self,number,brand,dayPrice*)*:  
 self.number = number  
 self.brand = brand  
 self.dayPrice = dayPrice  
 def getType*(*self*)*:  
 return self.typ  
 def setType*(*self,typ*)*:  
 self.typ = typ  
 def sumPrice*(*self,day*)*:  
 price = MotoVehicle.getDayPrice*()* \* day  
 if*(*day >= 7 and day < 30*)*:  
 price \*= 0.9  
 elif*(*day >= 30 and day < 150*)*:  
 price \*= 0.8  
 else:  
 price \*= 0.7  
 return price  
  
# 公共汽车类  
class Bus*(*object*)*:  
 def \_\_init\_\_*(*self,number,brand,dayPrice,seatCount*)*:  
 self.number = number  
 self.brand = brand  
 self.dayPrice = dayPrice  
 self.seatCount = seatCount  
 def getSeatCount*(*self*)*:  
 return self.seatCount  
 def setSeatCount*(*self,seatCount*)*:  
 self.seatCount = seatCount  
 def sumPrice*(*self,day*)*:  
 price = MotoVehicle.getDayPrice*()* \* day  
 if*(*day >= 3 and day < 7*)*:  
 price \*= 0.9  
 elif*(*day >= 7 and day < 30*)*:  
 price \*= 0.8  
 elif*(*day >= 30 and day <= 150*)*:  
 price \*= 0.7  
 else:  
 price \*= 0.6  
 return price  
  
# 大卡车  
class BigCar*(*object*)*:  
 def \_\_init\_\_*(*self,number,brand,dayPrice,dun*)*:  
 self.number = number  
 self.brand = brand  
 self.dayPrice = dayPrice  
 self.dun = dun  
 def getDun*(*self*)*:  
 return self.dun  
 def setDun*(*self,dun*)*:  
 return dun  
 def sumPrice*(*self,day*)*:  
 price = self.getDun*()* \* MotoVehicle.getDayPrice*()* \* day  
 return price  
  
#汽车管理类  
class MotoManager*(*object*)*:  
 def \_\_init\_\_*(*self,brand,typ,seat,dun*)*:  
 self.brand = brand  
 self.typ = typ  
 self.seat = seat  
 self.dun = dun  
 # 租车代码,返回租车类型  
 def zuChe*(*self*)*:  
 # 初始化  
 motos1 = Car*(*"京NY54689", "宝马", 800, "X6"*)* motos2 = Bus*(*"京CT56566", "金杯", 800, 16*)* motos3 = BigCar*(*"京CY88888", "大型卡车", 50, 100*)* if self.brand == motos1.brand and self.typ == motos1.getType*()*:  
 moto = motos1  
 return moto  
 elif self.brand == motos2.brand and self.seat == motos2.getSeatCount*()*:  
 moto = motos2  
 return moto  
 elif self.brand == motos3.brand and self.dun == motos3.getDun*()*:  
 moto = motos3  
 return moto  
  
# 测试类  
class Main\_manu*(*object*)*:  
 def \_\_init\_\_*(*self*)*:  
 pass  
 """后面不会调用，省略"""