**Classes02**

Study the definition of the Car class shown below and then answer the questions that follow it.

**class Car{**

**var carStyle : String**

**var carDoors : Int**

**var model: String?**

**var discountEnabled: Bool**

**var price : Double**

**init(){**

**carStyle = "Sedan"**

**carDoors = 4**

**model = "Honda"**

**price = 19999.79**

**discountEnabled = false**

**}**

**init(carStyle:String,carDoors:Int,price:Double,discountEnabled :Bool){**

**self.carStyle = carStyle**

**self.carDoors = carDoors**

**self.price = price**

**self.discountEnabled = discountEnabled**

**}**

**func setCarModel(carModel:String){**

**self.model = carModel**

**}**

**func getPriceAfterDiscount()->Double{**

**if discountEnabled{**

**return self.price - self.price \* 0.2**

**}else{**

**return self.price**

**}**

**}**

**func getCarDetails()->String{**

**if model == nil {**

**return "Car Style: \(carStyle), Model: NA, Doors: \(carDoors), Discount available: \(discountEnabled)"**

**}else{**

**return "Car Style: \(carStyle), Model: \(model!), Doors: \(carDoors), Discount available: \(discountEnabled)"**

**}**

**}**

**}**

1. Describe the third variable model

Model may or may not be initialized as **var model: String?**

1. Write the expected output for the following lines of code
2. **let car1 = Car()**

**let carPrice = car1.getPriceAfterDiscount()**

**print(car1.getCarDetails())**

**print("Price after discount:",carPrice)**

**Car Style: Sedan, Model: Honda, Doors: 4, Discount available: false**

**Price after discount: 19999.79**

1. **let car2 = Car(carStyle: "Coupe", carDoors: 2, price: 25780.34, discountEnabled: true)**

**print(car2.getCarDetails())**

**Car Style: Coupe, Model: NA, Doors: 2, Discount available: true**

1. **car2.setCarModel(carModel: "Dodge")**

**print(car2.getCarDetails())**

**print("Price before discount is:",car2.price)**

**print("Price after discount is:",car2.getPriceAfterDiscount())**

**Car Style: Coupe, Model: Dodge, Doors: 2, Discount available: true**

**Price before discount is: 25780.34**

**Price after discount is: 20624.272**