```
from enum import Enum
class Customer:
    def __init__(self,firstName,lastName,phoneNumber,customerEID,email):
        self.__firstName = firstName
        self.__lastName = lastName
        self.__phoneNumber = phoneNumber
        self.__customerEID = customerEID
        self. email = email
   def setFirstName(self,firstName):
        self. firstName = firstName
    def getFirstName(self):
       return self.__firstName
    def setLastName(self, lastName):
       self.__lastName = lastName
    def getLastname(self):
        return self.__lastName
   def setPhoneNumber(self,phoneNumber):
        self.__phoneNumber = phoneNumber
   def getPhoneNumber(self):
        return self.__phoneNumber
   def setCustomerEID(self,customerEID):
        self.__customerEID = customerEID
    def getCustomerEID(self):
       return self.__customerEID
    def setEmail(self,email):
        self.__email = email
    def getEmail(self):
        return self. email
    def getFullName(self):
       return self.__firstName + " " + self.__lastName
class Color(Enum):
   white = 1
   Black = 2
   Silver = 3
   Red = 4
class · Vehicle:
....def.__init__(self,make,model,year,color,ID):
·····self.__make·=·make
·····self.__model·=·model
·····self.__year·=·year
·····self.__color·=color
·····self.__ID·=·ID
....def · setMake(self, make):
·····self.__make·=·make
....def • getMake(self):
·····return·self. make
....def · setModel(self, model):
·····self.__model·=·model
....def · getModel(self):
·····return·self.__model
....def · setYear(self, year):
·····self.__year·=·year
....def · getyear(self):
·····return·self. year
....def · setColor(self,color):
.....self.__color=color
....def · getColor(self):
·····return·self.__color
....def · getID(self):
·····return·self.
....def · getVehicleInfo(self):
·····return·self.__make·+·"·"·+·self.__model·+·"·"·+·str(self.__year)
class · Service:
....def.__init__(self,name,description,duration,price):
·····self.__name=name
\cdots\cdots \\ \tt self.\_description=description
\cdots\cdotsself.__duration=duration
·····self.__price=price
····def·setName(self..name):
\cdots\cdots \text{self.}\underline{\hspace{0.5cm}} \text{name=name}
```

```
····def·getName(self):
·····return·self. name
....def · setDescription(self, description):
·····self.__description=description
....def • getDescription(self):
·····return·self.__dscription
....def · setDuration(self, duration):
\cdots\cdots \text{self.} \underline{\hspace{0.5cm}} \text{duration=duration}
....def • getDuration(self):
·····return·self. duration
....def·setPrice(self,price):
·····self.__price·=·price
....def · getPrice(self):
·····return·self.__price
class · Receipt:
····def·__init__(self,Customer,mechanic,vehicle,·services,·date,·taxes,·discount):
·····self.__customer=customer
·····self.__mechainc=mechanic
·····self.__vehicle=vehicle
·····self.__services=services
·····self.__date-=date
·····self.__taxes=taxes
\cdots\cdots \\ \tt self.\_discount=discount
....def · setMechanic(self, mechanic):
·····self. mechainc·=·mechanic
....def • getMechanic(self):
·····return·self.__mechainc
····def·setDate(self,date):
·····self.__date·=·date
....def • getDate(self):
·····return·self._
....def · setTaxes(self, taxes):
·····self.__taxes=taxes
....def · getTaxes(self):
·····return·self.__taxes
....def.setDiscount(self,discount):
·····self.__discount=discount
····def · getDiscount(self):
·····return·self. discount
....def • total(self):
.....total=sum(Service.getPrice().for.Service.in.self.__services)
·····total+=self.__taxes
·····total-=self.__discount
·····return·total
....def · PrintReceipt(self):
.....print("Customer · Name: · ", self. customer.getFullName())
.....print("cell.phone.Number:",self.__customer.getPhoneNumber())
.....print("Email:.",self. customer.getEmail())
.....print("Date:",self.__date)
.....print("Mechanic Name:", self.__mechainc)
.....print("Vehicle.Type:",self.__vehicle.getVehicleInfo())
.....print("Vehicle.color:.",self.__vehicle.getColor())
.....print("Vehicle ID: ", self.__vehicle.getID())
·····print("Services:",)
·····for·service·in·self. services:
\cdots\cdots\cdots \texttt{print}(\texttt{service.getName}() \cdot, \cdot \texttt{"} \cdots \texttt{"}, \cdot \texttt{service.getPrice}(), \texttt{"AED"}, \texttt{"}.\texttt{"}, \texttt{"} \texttt{duration} : \texttt{"}, \cdot \texttt{service.getDuration})
.....print("Taxes:", self.__taxes)
.....print("Discount:", .self.__discount)
.....print("Total:", .self.total())
#.Create.a.Customer.object
customer·--Customer("James", . "Jones", . "816-897-9862", "1234567890", . "jamesjones@example.com")
#.Create.a.Vehicle.object
vehicle · = · Vehicle ("Nissan", · "Altima", · 2014, · Color. Silver. name, · "AD-89034")
#.Create.a.Service.object
diagnostics·=·Service("1.Diagnostics", "looking·at·the·care·and·dlajd", "5·hours", ·15.0)
oilReplacement ·= · Service ("2.0il · Replacement", "changing · the · oil · ", "8 · h", · 120.49)
oilFilterParts -- Service ("3.0il Filter Parts", "changing oil Filter Parts", "8 h", .35)
\texttt{tireReplacement} \cdot = \texttt{Service}("4.\mathtt{Tire} \cdot \mathtt{Replacement} \cdot 2 \cdot ", "replace \cdot \mathtt{the} \cdot \mathtt{tire} \cdot ", "5 \cdot h", \cdot 100)
tire='Service("5.Tire'Replacement'(2)', "replace'the'tire', "5'h",'160)
#.Create.a.Receipt.object
\texttt{receipt} \cdot \texttt{=} \cdot \texttt{Receipt} (\texttt{customer}, \cdot \texttt{mechanic} = \texttt{"Hans} \cdot \texttt{K"}, \cdot \texttt{vehicle} = \texttt{vehicle}, \cdot \texttt{services} = \texttt{[diagnostics,oilReplacement,oilFilterParts,tireReplacement,oilFilterParts]} = \texttt{vehicle} + \texttt{vehicle
```

```
#.Print.the.receipt
receipt.PrintReceipt()
C→ Customer Name: James Jones
    cell phone Number: 816-897-9862
   Email: <u>jamesjones@example.com</u>
Date: March 13, 2022
   Mechanic Name: Hans K
   Vehicle Type: Nissan Altima 2014
   Vehicle color: Silver
   Vehicle ID: AD-89034
   Services:
    2.0il Replacement ...... 120.49 AED . duration: 8 h
    3.Oil Filter Parts ...... 35 AED . duration: 8 h \,
    4.Tire Replacement 2 ...... 100 AED . duration: 5 h
    5.Tire Replacement (2) ...... 160 AED . duration: 5 h
    Taxes: 51.5
   Discount: 11.5
   Total: 470.49
```

Colab paid products - Cancel contracts here

✓ 0s completed at 2:12 PM

×