CS112: Python Programming  
Assignment 03

1. Write a Python program to create a Vehicle class with name, max\_speed and mileage instance attributes.
2. Create a child class called Bus that will inherit all of the variables and methods of the Vehicle class in 1. Add a class variable vehicle\_type = ‘bus’ to Bus. Write a method called show() that prints out all the class and instance variables of the bus object.
3. Write a Rectangle class in Python, allowing you to build a rectangle with length and width attributes. Create a Perimeter() method to calculate the perimeter of the rectangle and a Area() method to calculate the area of ​​the rectangle. Create a method display() that display the length, width, perimeter and area of an object created using an instantiation on rectangle class.
4. Create a Python class called **BankAccount** which represents a bank account, having as attributes: **accountNumber** (numeric type), **name** (name of the account owner as string type), **balance**. Create a **Deposit()** method which manages the deposit actions. Create a **Withdrawal() method**  which manages withdrawals actions. Create an **bankFees()**method to apply the bank fees with a percentage of 5% of the balance account. Create a **display()**method to display account details.

Then test the following code and get the expected output.

# Testing the code :

newAccount = BankAccount(2178514584, "Albert" , 2700)

# Creating Withdrawal Test

newAccount.Withdrawal(300)

# Create deposit test

newAccount.Deposit(200)

# Display account informations

newAccount.display()

