Programming with Python
Lab Assignment 5

Note: Add docstring to all the classes & methods

1. Create a Vehicle class with attributes number of wheels, number of airbags, engine horsepower, max speed, mileage, etc. Create a constructor and a method that displays vehicle info.

2. Create a child class Bus, from Vehicle class, that will inherit all of the variables and methods of the Vehicle class. This Bus class will have its own attributes – number of doors, number of seats, fare per km, etc, along with inherited attributes. Write a method to calculate bus fare by accepting distance in km as parameter.

3. Create class BankAccount with attributes cutomer_id, customer_name, account_balance. Write methods to withdraw and deposit amounts. If during withdrawing money from the account, the account balance is not sufficient, display appropriate messages. Create objects of this class and test methods to withdraw and deposit.

4. Create class RegularAccount derived from base class BankAccount. There is a penalty of Rs. 10.00 if the balance falls below a minimum of Rs.3000. If customer tries to withdraw amount and balance goes below Rs. 3000, deduct penalty amount from the balance and notify customer about it, and if after deducting penalty amount if balance goes in below zero notify customer about insufficient balance.