Introduction to Python II (Exercises 06)   Intro OOP

1

```python
class vehicle():

    vehicle_count = 0

    def __init__(self, wheels, passengers, max_speed):
        self.wheels = wheels
        self.passengers = passengers
        self.max_speed = max_speed
        self.speed = 0
        vehicle.vehicle_count += 1

    def current_speed(self):
        return self.speed

    def set_speed(self, new_speed):
        self.speed = new_speed

V01 = vehicle(4,2,100)
V02 = vehicle(6,4,75)

print("V01 current speed: {}".format(V01.current_speed()))
print("V02 current speed: {}".format(V02.current_speed()))

V01.set_speed(90)
V02.set_speed(60)

print("V01 current speed: {}".format(V01.current_speed()))
print("V02 current speed: {}".format(V02.current_speed()))
```

2

```python
class Auto(vehicle):

    def __init__(self, wheels, passengers, max_speed, color, brand):
        super().__init__(wheels, passengers, max_speed)

        self.color = color
        self.brand = brand

class Motorcycle(vehicle):
    def __init__(self, wheels, passengers, max_speed, color, brand):
        super().__init__(wheels, passengers, max_speed)

        self.color = color
        self.brand = brand

A01 = Auto(4,5,160,'Black', 'GM')
M01 = Motorcycle(2,1,180,'Red', 'Kawasaki')

print("A01 current speed {}".format(A01.current_speed()))
print("M01 current speed {}".format(M01.current_speed()))

M01.set_speed(95)
A01.set_speed(100)

print("A01 current speed {}".format(A01.current_speed()))
print("M01 current speed {}".format(M01.current_speed()))

print("A01 color: {}, Brand: {}".format(A01.color, A01.brand))
print("M01 color: {}".format(M01.color))
```