

Asuar, Blaine M

C204

7OOP

FINALS ACT 1

SOURCE CODE :

```
class Car:
    def __init__(self, color=None, price=0.0, size=None):
        self.__color = color
        self.__price = price
        self.__size = size.upper() if size else None

    @property
    def car_color(self):
        return self.__color

    @property
    def car_price(self):
        return self.__price

    @property
    def car_size(self):
        return self.__size

    # String representation
    def __str__(self):
        size_map = {'S': 'small', 'M': 'medium', 'L': 'large'}
        size_desc = size_map.get(self.__size, "")
        if size_desc:
            return f"Car ({self.__color}) - P{self.__price:.2f}-{size_desc}"
        else:
            return f"Car ({self.__color}) - P{self.__price:.2f}"

# ===== MAIN TEST SECTION =====
if __name__ == '__main__':
    c1 = Car("red", 19999.85, "m")
    c2 = Car("blue", 5000000., "l")
    c3 = Car("green", 123456.1231, "s")

    print("Action: Invoking the Car class constructor using Car('red', 19999.85, 'M')")
    print("Output:")
    print(c1)
    print("\nAction: Invoking the Car class constructor using Car('blue', 5000000., 'l')")
    print("\nOutput:")
    print(c2)
    print("\nAction: Invoking the Car class constructor using Car('green', 123456.1231, 'S')")
```

```
print("\nOutput:")
print(c3)
```

sample code:

```
C:\Users\COMLAB\PycharmProjects\pythonProject1\venv\Scripts\python.exe C:\Users\COMLAB\PycharmProjects\pythonProject1\car.py

Action: Invoking the Car class constructor using Car('red', 19999.85, 'M')
Output:
Car (red) - P19999.85-medium

Action: Invoking the Car class constructor using Car('blue',5000000., 'L')
Output:
Car (blue) - P5000000.00-large

Action: Invoking the Car class constructor using Car('green', 123456.1231, 'S')
Output:
Car (green) - P123456.12-small
```