

Encapsulation

Code:

```
1- class Car:
2-     def __init__(self, color: str, price: float, size: str):
3-         self.__color = color
4-         self.__price = price
5-         self.__size = size.upper()
6-
7-         #getters
8-     def get_color(self):
9-         return self.__color
10-
11-     def get_price(self):
12-         return self.__price
13-
14-     def get_size(self):
15-         return self.__size
16-
17-         #setters
18-     def set_color(self, c: str):
19-         self.__color = c
20-
21-     def set_price(self, p: float):
22-         self.__price = p
23-
24-     def set_size(self, s: str):
25-         self.__size = s.upper()
26-
27-     def __str__(self):
28-         if self.__size == 'S':
29-             size_desc = 'small'
30-         elif self.__size == 'M':
31-             size_desc = 'medium'
32-         elif self.__size == 'L':
33-             size_desc = 'large'
34-         else:
35-             size_desc = 'Invalid'
36-
37-         return f"Car ({self.__color}) - D{self.__price:.2f} - {size_desc}"
38-
39-
40-
41- print('Action: Invoking the Car class constructor using Car("red", 19999.85, \'M\').')
42- car1 = Car("red", 19999.85, 'M')
43- print("Output:")
44- print(car1)
45- print()
46-
47- print('Action: Invoking the Car class constructor using Car("blue", 50000.00, \'L\').')
48- car2 = Car("blue", 50000.00, 'L')
49- print("Output:")
50- print(car2)
51- print()
52-
53- print('Action: Invoking the Car class constructor using Car("green", 12345.67, \'S\').')
54- car3 = Car("green", 12345.67, 'S')
55- print("Output:")
56- print(car3)
```

Output:

```
Ln: 1, Col: 1
Run Share $ Command Line Arguments
Action: Invoking the Car class constructor using Car("red", 19999.85, 'M').
Output:
Car (red) - 19999.85 - medium
Action: Invoking the Car class constructor using Car("blue", 50000.00, 'L').
Output:
Car (blue) - 50000.00 - large
Action: Invoking the Car class constructor using Car("green", 12345.67, 'S').
Output:
Car (green) - 12345.67 - small

** Process exited - Return Code: 0 **
```