

Finals Lab Task 1. Encapsulation

A Car That Works

```
class Car:
    def __init__(self, color: str, price: float, size: str):
        self.color = color
        self.price = price
        self.size = size.upper()

    def get_color(self) -> str:
        return self.color

    def get_price(self) -> float:
        return self.price

    def get_size(self) -> str:
        return self.size

    def set_color(self, color: str) -> None:
        self.color = color

    def set_price(self, price: float) -> None:
        self.price = price

    def set_size(self, size: str) -> None:
        self.size = size.upper()
```

```
Car (red) - P19999.85 - medium
Car (blue) - P50000.00 - large
Car (green) - P12345.67 - small
```

```
Process finished with exit code 0
```

```
def __str__(self) -> str:
    size_descriptor = {
        'S': 'small',
        'M': 'medium',
        'L': 'large'
    }.get(self.size, 'unknown')

    formatted_price = f"{self.price:.2f}"
    return f"Car ({self.color}) - P{formatted_price} - {size_descriptor}"
```

```
car1 = Car("red", 19999.85, 'M')
print(car1)
```

```
car2 = Car("blue", 50000.00, 'L')
print(car2)
```

```
car3 = Car("green", 12345.67, 'S')
print(car3)
```