



Task(15.1)

Strategy Pattern

Requirements:

Implement a simple Strategy Design Pattern for calculating vehicle speed based on different car brands.

1.Abstract Interface:

- Define an interface `IStrategy` with a pure virtual method `calculateSpeed()`. This will act as a base for different strategies representing how vehicle speed is determined.

2.Concrete Strategy Classes:

- Create two classes `StrategyBMW` and `StrategyMini` that inherit from `IStrategy`. Implement the `calculateSpeed()` method in each class, where:
 - `StrategyBMW` should print "BMW Strategy".
 - `StrategyMini` should print "Mini Cooper Strategy".

3.Vehicle Class:

- Create a class `Vehicle` that accepts an `IStrategy*` in its constructor. This strategy will define how the vehicle calculates its speed.
- The `Vehicle` class will have a `VehicleSpeed()` method that calls the strategy's `calculateSpeed()` method.

4.Main Function:

- Create two instances of `Vehicle`, one using `StrategyBMW` and the other using `StrategyMini`.
- Call the `VehicleSpeed()` function on each instance to see the result of the strategy in action.

5.Create a class diagram for all the classes using <https://app.diagrams.net/>

Thank You