# **Vehicle Rental Management System**

**Description :** Create a simple oop program which simulates a Vehicle Rental Management System by creating the below required classes and interface.

#### Interfaces:

### 1) IInfoDisplay

Туре	Name	Access Modifier	Return Type	Parameters	Description
Method	ShowInfo()	Public	Void	-	A method which displays vehicle info.

#### Classes:

### 1) Vehicle

Туре	Name	Access Modifier	Return Type	Parameters	Description
decimal	BasePrice	Protected	-	-	The base hourly price for any vehicle has a default value of 20 dollars.
int	VehicleCount	Public static	-	-	A static field which <b>increases by 1</b> every time a new vehicle gets rented.
string	OwnerName	Public	-	-	The owner of the rented vehicle
string	ModelName	Public	-	-	The model name of the vehicle.
int	Hours	Public	-	-	Number of hours the vehicle is rented for
constructor	Vehicle	public	-	OwnerName, ModelName, Hours	Initiate the values of the properties with their respective parameter value, and also increases  VehicleCount by 1
Method	CalculateTotal Price()	Public virtual	decimal	-	Calculates and returns the total price for the vehicle by this formula (BasePrice * Hours)

# 2) SUV: Extends Vehicle Class, Implements IInfoDisplay interface.

Туре	Name	Access Modifier	Return Type	Parameters	Description
constructor	SUV	public	-	OwnerName, ModelName, Hours	Uses base constructor to initiate properties.
method	CalculateTotal Price()	Public override	decimal	-	Overrides the base class method by calculating and returning the total price for the SUV by this formula ((BasePrice + 10) * Hours)
method	ShowInfo()	Public	-	-	Implements the <b>IlnfoDisplay</b> interface method which displays the full info about the rented SUV in this format: [SUV] Owner: {OwnerName}, Model: {Model}, Hours: {Hours}, Fee: {CalculateTotalPrice()}

# 3) MotorCycle: Extends Vehicle Class, Implements IInfoDisplay interface.

Туре	Name	Access Modifier	Return Type	Parameters	Description
constructor	MotorCycle	public	-	OwnerName, ModelName, Hours	Uses base constructor to initiate properties.
method	CalculateTotal Price()	Public override	decimal	-	Overrides the base class method by calculating and returning the total price for the MC by this formula ((BasePrice - 5) * Hours)
method	ShowInfo()	Public	-	-	Implements the <b>IlnfoDisplay</b> interface method which displays the full info about the rented MC in this format: [MC] Owner: {OwnerName}, Model: {Model}, Hours: {Hours}, Fee:{CalculateTotalPrice()}

**Main Method:** In Main Method create an object of each class and use their methods to calculate prices and show info, and at the end display the number of rented vehicles.