

Finish Truck Class

The car designers have asked that trucks act a bit differently from sedans. Trucks need a new property called `Weight`. Whenever a truck is constructed, its number of wheels will depend on its weight. For example, a heavier truck might need 12 instead of 8 wheels to support itself.

Just like sedans, trucks will also `SpeedUp()` and `SlowDown()`.

☒ Instructions

1.

Add a `public double Weight` property with just a getter.

Hint



The format of an automatic property with get only is:

```
bool IsFake
{
    get;
}
```

2.

Add a constructor to the `Truck` class with two parameters: `double speed` and `double weight`. It should:

Set the `Speed` property using `speed`

Set the `Weight` property using `weight`

Set a random `LicensePlate` value using `Tools.GenerateLicensePlate()`

Set `Wheels` to 8 if `Weight` is less than 400 and set `Wheels` to 12 otherwise

Hint



To make a random license plate, a utility class is provided for you. Use it in the constructor like so: `Tools.GenerateLicensePlate()` .

Remember that a constructor looks like a method, but there is no return type listed and the method name is the name of its enclosing class:

```
class Forest
{
    public int Area;

    public Forest(int area)
    {
        Area = area;
    }
}
```

3.
Add a `void SpeedUp()` method that increases the `Speed` property by `5` .

Hint



Here's an example method, which increases the `Area` property:

```
public void IncreaseArea(int growth)
{
```

```
Area = Area + growth;  
}
```

4.

Did you get an error? There is no setter for the `Speed` property. Add a private setter to that property.

Hint



Here's an example of a property with get and set methods:

```
bool IsFake  
{ get; set; }
```

Without a setter, the `SpeedUp()` method won't be able to access `Speed`, and you'll get an error like this:

```
error CS0200: Property or indexer 'Truck.Speed' cannot be assigned to --  
it is read only
```

5.

Add a `void SlowDown()` method that decreases the `Speed` by `5`.