



Figure 1: Reliant Robin

Practical - Encapsulation

Give yourself about an hour

For this exercise, you will write the class `Car.java`. We have given you a Runner class (`Runner.java`) to help test your class. Find it at the bottom of PRE-PROCESSING: "Encapsulation Runner". Take a look at it before you start working.

The car class should contain the following private fields:

- `previouslyOwned` [boolean]
- `numWheels` [int]
- `mileage` [int]
- `type` [String]

The car class should contain the following public fields:

- `colour` [String]

The Car class should have a constructor that takes a single boolean argument. If true, the constructor should set the `previouslyOwned` field to true, and the `mileage` field to 20000. Otherwise, the constructor should set the `previouslyOwned` field to false, and `mileage` to 0. The constructor does not have to do anything else.

You need to write getters and setters in the Car class for all of the private fields. Check `Runner.java` to see how to name your getters and setters. If the type of car is set to "Reliant Robin", then the `numWheels` variable needs to be set to 3. Otherwise, the `numWheels` variable needs to be set to four.

If you have written the `Car.java` class correctly, the output of running `Runner.java` should look like the following:

```
Checking first car:
true
true
true
true
true
Checking second car:
true
true
true
true
true
Checking third car:
true
true
true
true
true
```

Submit your `Car.java` file in a zip file to the Autograder.