# Reflection

**Step 1**

Create class „Car“, with property „Distance“ (double) and field „Time“ (int).

Create method „AverageSpeed“, that will return average speed (Distance/Time).

Create method „TravelingTime“, with argument „currentDistance“ (double). This method will return average speed multiplied by currentDistance.

* Write names of all properties, fields and methods of the „Car“
* Create instance of the „Car“ (using reflection).
* Set values of the property Distance and the field Time.
* Call the method „AverageSpeed“, and print result to the console.
* Call the method „TravelingTime“, and print result to the console.
* Move class Car to the external library.
* Load this external library using reflection (and make all previous steps work again).

**Step 2**

Create very simple ORM framework. There will be function that can handle any object as parameter. Function will collect all properties of given object and generate SQL insert query for them. Use name of the class as the name of the table. Example:

Class: class Car { public int Seed { get;set; } public string Color { get;set; } }

SQL: “INSERT INTO [Car] ([Speed], [Color]) VALUES (2, “Red”);”

Then create attribute „Table“ and „IgnoreInsert“. Attribute „Table“ will be used to decorate class with the name of the table. Attribute „IgnoreInsert“ will be used to decorate properties that should be ignored during insert.