Homework 9

Make a system for managing information for the motor vehicles in Bulgaria.

The system shall have different containers for cars, trucks, motorcycles. The class describing a vehicle must have the following members :

* Registration number (string)
* Weight (float in tones)
* Number of seats (short int)
* Chassis number (string)
* Engine number (string)
* Owner (string)
* Date of first registration (custom class Date) – when the car was firstly registered
* Date of registration in country (custom class Date) – when the car was registered with its current registration

And Functions:

* Getter for all of the information

The system shall support multithread search for each container (you start searching for a vehicle with a registration number and the program initialize search in each container on a different thread).

Lambda expressions shall be used in the software for the search (consider using for\_each function).

Lambda expressions shall be used in the software for displaying the information ( the function must look like : searchForACarWithRegistrationNumber(string registrationNumber, void aLambdaExpressionToBeExecutedWhenFound())

A simple example of using the software: (<< - Output, >> - Input)

<<Please enter registration number of a vehicle to search

>>A2273MM

<<Searching

<<A2273MM

<<Weight: 1.0 t

<<Number of seats: 5

<<Chassis number: 123123123123123

<<Engine number: D14A400192

<<Owner: Martin Kuvandzhiev

<<Date of first registration: 29.07.2000

<<Date of registration in country: 14.03.2014