# Assignment 1-16

Please complete the problems listed below. This assignment forms part of the assessment for this module and you are required to upload your solution in the template file available on Moodle. This file should be used to write your solution and should be uploaded to Moodle on or before midnight on Sunday next. You must include as header your name and student number. For those who don’t have Moodle access a copy of the file is printed on the reverse of this sheet.

**Question 1**

Design and implement a class called Car that has the following attributes: make of car, registration number, price and distance travelled. The class should have a display method, methods to retrieve information on the current state of the class: make, registration, price and distance, and a single method that can modify its price. Write a program to test your class.

**Question 2**

A logic gate is always in one of two states: on/off. State can be represented as a Boolean value. Your task is to implement a class that models a logic gate called LogicGate. Your class should have a constructor that takes a Boolean value as argument and sets its state to the given argument value. The methods for this class are listed in the table below. Write a program to test your class.

|  |  |
| --- | --- |
| **Public Method** | **Semantics** |
| not() | Change state to its opposite. Not false = true; not true = false |
| state() | Return current state |
| set() | Change state to true |
| negate() | Change state to false |

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\* Assignment 1\_2016

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\* @author:

\* @Student Number:

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public class Assignment1-2016{

//===============================================

//Code for Question 1

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//Code for Question 2

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}