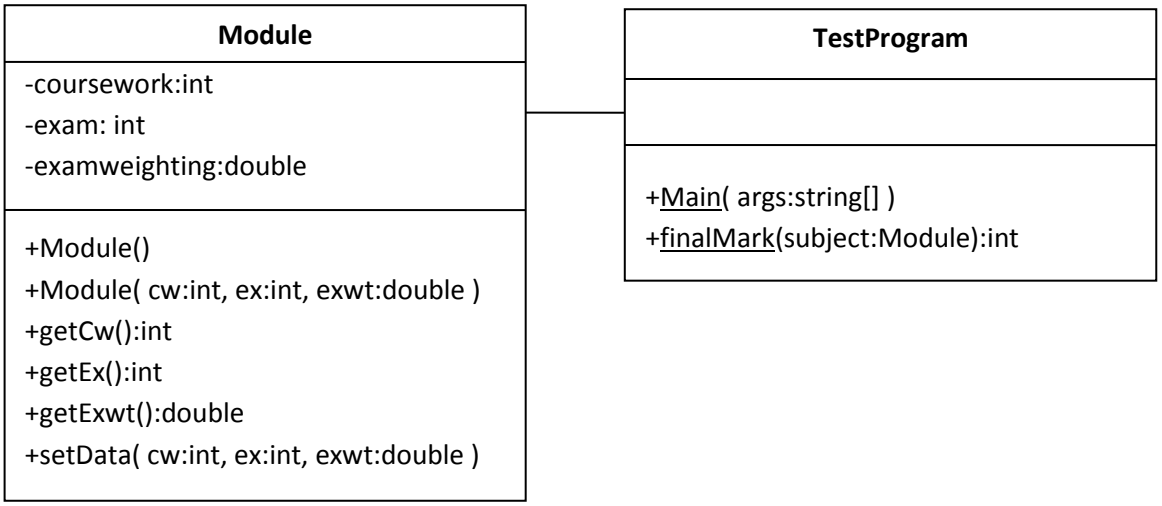
PRACTICAL: MANIPULATING ATTRIBUTES VIA OVERLOADED CONSTRUCTORS, GET AND SET METHODS



1. Develop a C# application as defined in the above class diagram. The Module class should have three non-static private attributes; a coursework mark, an exam mark, and an exam weighting as a fraction 0-1. Include three public 'get' methods for returning each of the attribute values, one public set method (for modifying all three attributes), two overloaded constructors (one to initialise all three attributes to zero, and one to assign the attributes from values passed to the constructor). A second class called TestProgram should contain method Main() and a static method finalMark() to calculate and return the overall single mark for a module, expressed as an int.

2. Develop the source code for your class, so that Main() instantiates two objects of class Module (eg english and chemistry). Both objects should have their attributes assigned at creation (instantiation), though one should be initialised with zero values which are subsequently modified by the set method. Method Main() should then print appropriate information about each subject (object) including the final single mark for each subject. This should be done by Main() calling each objects' instance methods and also by calling static method finalMark() which passes an object of Module to the method and returns the final overall mark.