OBJECT ORIENTED PROGRAMMING

Intro (Terminology)

- **classes**
    - a class has its own variables and methods
    - acts as a **template** from which similar objects called instances are created
    - when you want to create an object the **new** operator is used with the class name or constructor (which has the same name as the class)
- **objects**
    - every object is an **instance** of a class
    - the members (variables/methods) of an object are accessed using dot notation

Creating Your Own Class and using it

- class
- fields (private)
- properties (get/set) public
- methods
- constructors

Advanced Concepts

- **Encapsulation**
    - **hiding details** of an object from other parts of a program
    - the object can be used only through its access methods, which are written to keep the object consistent and secure
- **Static Methods**
    - don't need to make instance of class to use
- **Method Overloading**
    - two methods of a class have the same name but different parameter lists
- **Inheritance**