

# [0199] Chapter 1 Summary

## Key things to remember:

- C# is used to create programs that run inside of the .NET Environment and can (optionally) interact with other .NET compatible programs easily.
- C# is a pure object-oriented programming environment where ALL data types are objects.
- Many of C#'s simpler data types are just .NET data types masquerading as basic C# types - i.e., "int" is the same as .NET's "Int32"
- C# programs are compiled into "Intermediate Language (IL)" - a low-level language which executes inside the .NET CLR (Common Language Runtime).
- The JIT Compiler is part of the CLR that automatically converts heavily used .NET IL code into high-performance CPU-specific assembly code.
- Periodically, the CLR's Garbage Collector scans memory and discards any unreferenced objects that it finds.
- Compiled C# code is stored in an "Assembly" file which typically has a name ending in "EXE" (for programs) or "DLL" (for libraries).