**Extension Methods:** Extension methods enable you to "add" methods to existing types without creating a new derived type, recompiling, or otherwise modifying the original type. Extension methods are static methods, but they're called as if they were instance methods on the extended type. Their first parameter specifies which type the method operates on. The parameter is preceded by the [**this**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/this) modifier. Extension methods are only in scope when you explicitly import the namespace into your source code with a using directive.

* Extension methods cannot access private variables in the type they are extending.
* Extension methods must be defined in a non-generic static class.



