C# 9 cheat sheet

**Records**

public record Person(string FirstName, string LastName);

**Init only setters**

public struct WeatherObservation

{

public DateTime RecordedAt { get; init; }

public decimal TemperatureInCelsius { get; init; }

public decimal PressureInMillibars { get; init; }

}

**Top-level statements**

using System;

Console.WriteLine("Hello World!");

**Pattern matching enhancements**

public static bool IsLetterOrSeparator(this char c) =>

c is (>= 'a' and <= 'z') or (>= 'A' and <= 'Z') or '.' or ',';

**Target-typed new expressions**

Dictionary<string, List<int>> field = new() {

{ "item1", new() { 1, 2, 3 } }

};

**static anonymous functions**

const int y = 1;

MyMethod(static x => x + y);

**Lambda discard parameters**

(\_, \_) => 0

**Attributes on local functions**

static void Main(string[] args)

{

DebugMessage();

[Conditional("DEBUG")]

static void DebugMessage() => Console.WriteLine("Debug only message");

}