

# C# 11 cheat sheet

## Raw string literals

```
string longMessage = """
    This is a long message.
    It has several lines.
    Some are indented
        more than others.
    Some should start at the first column.
    Some have "quoted text" in them.
    """;
```

## Generic attributes

```
public class GenericAttribute<T> : Attribute { }
```

## List patterns

```
int[] numbers = { 1, 2, 3 };

Console.WriteLine(numbers is [1, 2, 3]); // True
Console.WriteLine(numbers is [1, 2, 4]); // False
Console.WriteLine(numbers is [1, 2, 3, 4]); // False
Console.WriteLine(numbers is [0 or 1, <= 2, >= 3]); // True
```

## File-local types

```
file interface IWidget
{
    int ProvideAnswer();
}

file class HiddenWidget
{
    public int Work() => 42;
}

public class Widget : IWidget
{
    public int ProvideAnswer()
    {
        var worker = new HiddenWidget();
        return worker.Work();
    }
}
```

# C# 11 cheat sheet

## Required members

```
public class Person
{
    public Person() { }

    [SetsRequiredMembers]
    public Person(string firstName, string lastName) => (FirstName, LastName) = (firstName,
lastName);

    public required string FirstName { get; init; }
    public required string LastName { get; init; }

    public int? Age { get; set; }
}
```