**C# 8.0 Features**

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**Null-coalescing assignment**

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List<int> numbers = null;

int? i = null;

numbers ??= new List<int>();

numbers.Add(i ??= 17);

numbers.Add(i ??= 20);

**Static local functions**

**--------------------------------**

int M()

{

int y = 5;

int x = 7;

return Add(x, y);

static int Add(int left, int right) => left + right;

}

**C#9.0 Features**

**===================**

**Pattern matching enhancements:**

**-------------------------------------------------**

if(numbers is not null)

{

}

OR

if(numbers!=null)

{

}

c is >= 'a' and <= 'z' or >= 'A' and <= 'Z'

**Record types:**

**---------------------**

public record Person

{

public string LastName { get; }

public string FirstName { get; }

public Person(string first, string last) => (FirstName, LastName) = (first, last);

}