

# Creating Local Functions

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# What Are Local Functions?



- A function declared within another function
- Helper methods inside the function they help
- Parameters and local variables from enclosing scope are visible

# Local Functions

```
public int Fibonacci(int x)
{
    if (x < 0) throw new ArgumentException();
    return Fib(x).current;

    (int current, int previous) Fib(int i)
    {
        if (i == 0) return (1, 0);
        var (p, pp) = Fib(i - 1);
        Console.WriteLine($"{p}");
        return (p + pp, p);
    }
}
```

# Demo



- Local Functions

# Summary



- Local functions are declared within another function
- Helper functions are encapsulated
- Parameters and local variables are visible