

Anonymous function in C#

- ✓ The Delegates are used to reference any methods that has the same signature as that of the delegate.
- ✓ As the same suggests, an anonymous method is a method without a name just the body.
- ✓ Anonymous methods can be defined using the delegate keyword.
- ✓ It is introduced in C# 2.0.
- ✓ Anonymous method can be assigned to a variable of delegate type.
- ✓ You need not specify the return type in an anonymous method, it is inferred from the return statement inside the method body.

Lambda Expression in C#

- ✓ C# 3.0 introduced the lambda expression.
- ✓ It also works like an anonymous method.
- ✓ The difference is that in Lambda expressions you don't need to specify the type of the value that you input thus making it more flexible to use.
- ✓ It means lambda expression simplifies the anonymous function or you can say that lambda expression is a shorthand for an anonymous function.
- ✓ The => is the lambda operator which is used in all lambda expressions.

The Lambda Expressions can be of two types:

1. **Statement Lambda:** Consists of the input and a set of statements to be executed.

Syntax:

Input => { statements };

2. **Expression Lambda:** Consists of the input and the expression.

Syntax:

Input => expression ;