

To Create solution + projects

Create a solution

```
dotnet new sln -n CalcSolution
```

```
dotnet new classlib -n CalcLibrary
```

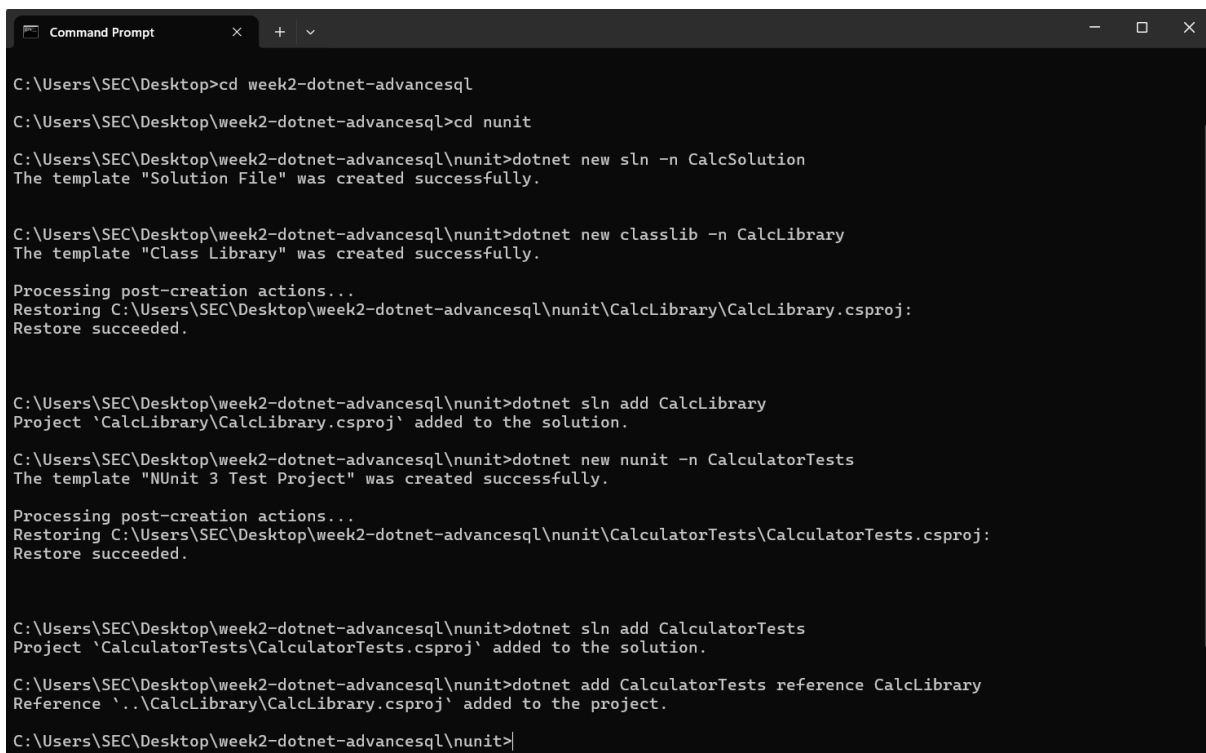
```
dotnet sln add CalcLibrary
```

Create the NUnit test project

```
dotnet new nunit -n CalculatorTests
```

```
dotnet sln add CalculatorTests
```

```
dotnet add CalculatorTests reference CalcLibrary
```



```
Command Prompt
C:\Users\SEC\Desktop>cd week2-dotnet-advancesql
C:\Users\SEC\Desktop\week2-dotnet-advancesql>cd nunit
C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet new sln -n CalcSolution
The template "Solution File" was created successfully.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet new classlib -n CalcLibrary
The template "Class Library" was created successfully.

Processing post-creation actions...
Restoring C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit\CalcLibrary\CalcLibrary.csproj:
Restore succeeded.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet sln add CalcLibrary
Project 'CalcLibrary\CalcLibrary.csproj' added to the solution.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet new nunit -n CalculatorTests
The template "NUnit 3 Test Project" was created successfully.

Processing post-creation actions...
Restoring C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit\CalculatorTests\CalculatorTests.csproj:
Restore succeeded.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet sln add CalculatorTests
Project 'CalculatorTests\CalculatorTests.csproj' added to the solution.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>dotnet add CalculatorTests reference CalcLibrary
Reference '..\CalcLibrary\CalcLibrary.csproj' added to the project.

C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>
```

CalcLibrary/[Class1.cs](#)

```
namespace CalcLibrary
```

```
{
    public class Calculator
    {
        public int Add(int a, int b) => a + b;
    }
}
```

CalculatorTests/UnitTest1.cs

```
using NUnit.Framework;
using CalcLibrary;

namespace CalculatorTests
{
    [TestFixture]
    public class CalculatorTests
    {
        private Calculator _sut;

        [SetUp]
        public void Setup() => _sut = new Calculator();

        [Test]
        public void Add_With1And2_Returns3()
        {
            var result = _sut.Add(1, 2);
            Assert.That(result, Is.EqualTo(3));
        }
    }
}
```

```
14 [Test]
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + - X

```
PS C:\Users\SEC\Desktop\week2-dotnet-advancesql> cd nunit
PS C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit> dotnet test
Restore complete (0.6s)
  Calclibrary succeeded (4.4s) → Calclibrary\bin\Debug\net9.0\Calclibrary.dll
  CalculatorTests succeeded (3.6s) → CalculatorTests\bin\Debug\net9.0\CalculatorTests.dll
NUnit Adapter 4.6.0.0: Test execution started
Running all tests in C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit\CalculatorTests\bin\Deb
ug\net9.0\CalculatorTests.dll
  NUnit3TestExecutor discovered 1 of 1 NUnit test cases using Current Discovery mode, Non-Explic
icit run
NUnit Adapter 4.6.0.0: Test execution complete
  CalculatorTests test succeeded (3.6s)
```

Test summary: total: 1, failed: 0, succeeded: 1, skipped: 0, duration: 3.6s
Build succeeded in 12.7s
PS C:\Users\SEC\Desktop\week2-dotnet-advancesql\nunit>