# NUnit Hands-On Lab 7 - Solutions

## Parameterized Test Cases

Parameterized test cases help in reducing code duplication and allow you to run the same test with different sets of inputs.  
This is especially useful for testing the same method with multiple expected results.

## LeapYearCalculatorLib - Test Scenarios

[TestCase(2000, 1)]  
[TestCase(2024, 1)]  
[TestCase(1600, -1)] // Invalid input (less than 1753)  
public void IsLeapYear\_ValidLeapYearInputs\_ReturnsExpected(int year, int expected)  
{  
 var result = LeapYearCalculatorLib.LeapYearCalculator.IsLeapYear(year);  
 Assert.That(result, Is.EqualTo(expected));  
}

[TestCase(2019, 0)]  
[TestCase(2023, 0)]  
public void IsLeapYear\_NonLeapYearInputs\_ReturnsZero(int year, int expected)  
{  
 var result = LeapYearCalculatorLib.LeapYearCalculator.IsLeapYear(year);  
 Assert.That(result, Is.EqualTo(expected));  
}

[TestCase(1700, -1)]  
[TestCase(10000, -1)]  
public void IsLeapYear\_InvalidYearInputs\_ReturnsMinusOne(int year, int expected)  
{  
 var result = LeapYearCalculatorLib.LeapYearCalculator.IsLeapYear(year);  
 Assert.That(result, Is.EqualTo(expected));  
}