Exercise:

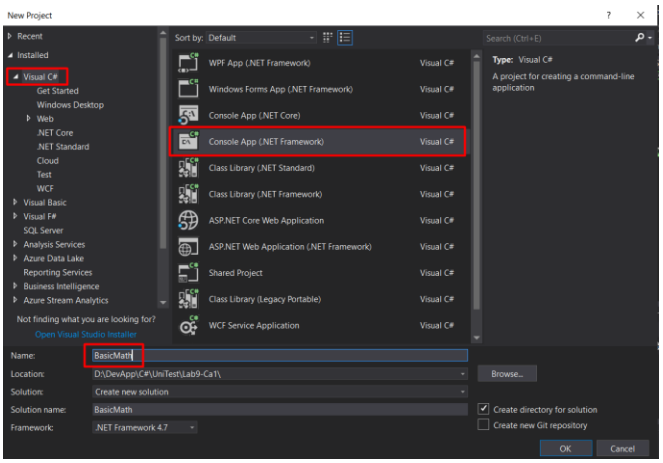
- Create a Console Project (named: **BasicMath**) to define class **BasicMaths** with 4 methods (Add, Substract, Divide, Mutiply)
- Create a Unit Test Project to Test those 4 methods.

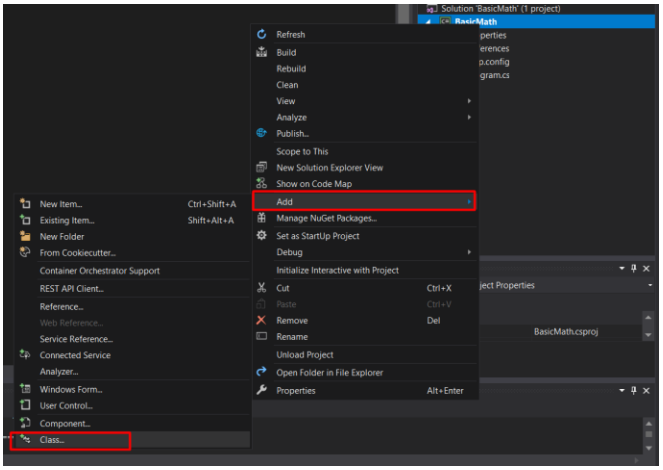
```
// BasicMath
namespace BasicMath
{
    public class BasicMaths
    {
        public double Add(double num1, double num2){
            return num1 + num2;
        }
        public double Substract(double num1, double num2){
            return num1 - num2;
        }
        public double Divide(double num1, double num2){
            return num1 / num2;
        }
        public double Multiply(double num1, double num2){
            return num1 + num2;
        }
    }
}
```

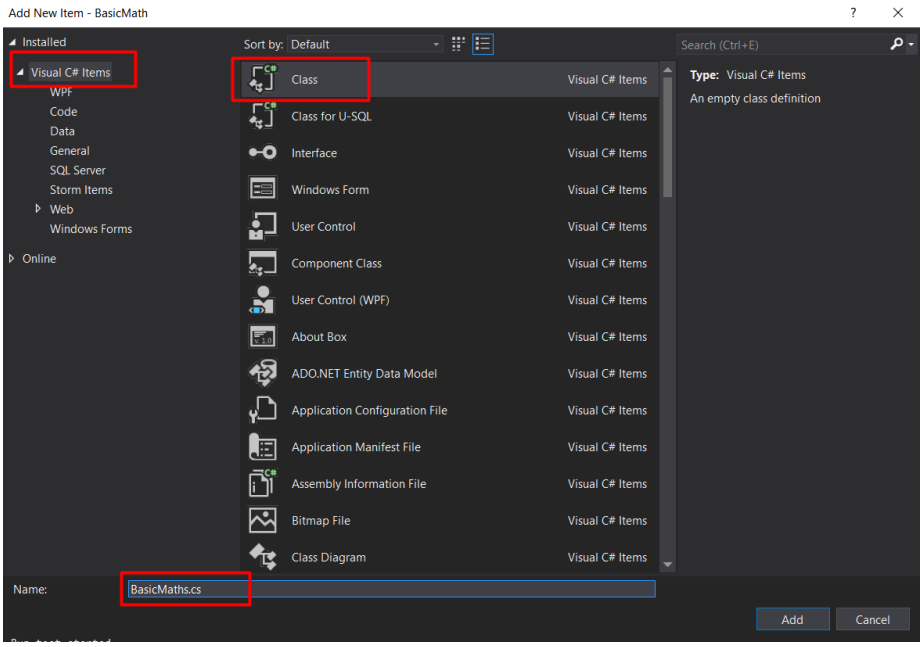
```
//UnitTest

[TestClass]

public class UnitTest1
    {
        [TestMethod]
        public void Test_AddMethod(){
            BasicMaths bm = new BasicMaths();
            double res = bm.Add(10, 10);
            Assert.AreEqual(res, 20);
        }
        [TestMethod]
        public void Test_SubstractMethod(){
            BasicMaths bm = new BasicMaths();
            double res = bm.Substract(10, 10);
            Assert.AreEqual(res, 0);
        }
        [TestMethod]
        public void Test_DivideMethod(){
            BasicMaths bm = new BasicMaths();
            double res = bm.divide(10, 5);
            Assert.AreEqual(res, 2);
        }
        [TestMethod]
        public void Test_MultiplyMethod(){
            BasicMaths bm = new BasicMaths();
            double res = bm.Multiply(10, 10);
            Assert.AreEqual(res, 100);
        }

    }
```

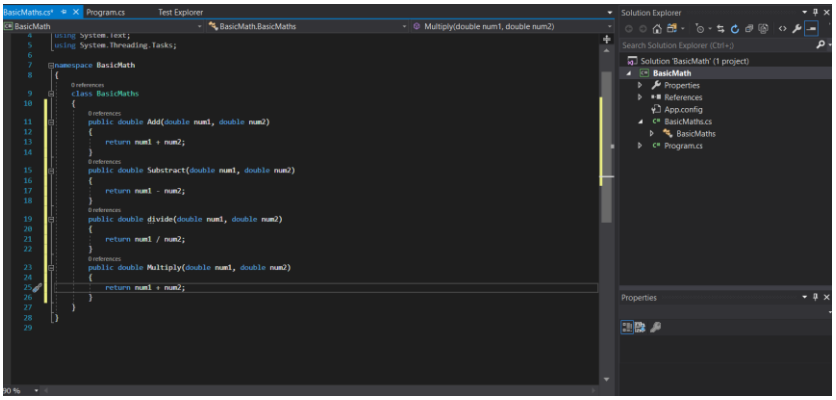
Here you go for guidelines:

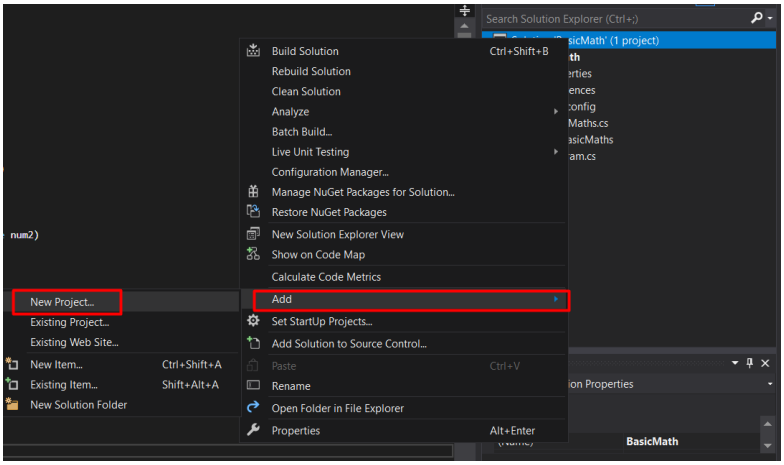
1. Write a program with C# for those 4 calculator










Search Solution Explorer (Ctrl+;)
Build Solution Ctrl+Shift+B
Rebuild Solution
Clean Solution
Analyze
Batch Build...
Live Unit Testing
Configuration Manager...
Manage NuGet Packages for Solution...
Restore NuGet Packages
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Add
Set StartUp Projects...
Add Solution to Source Control...
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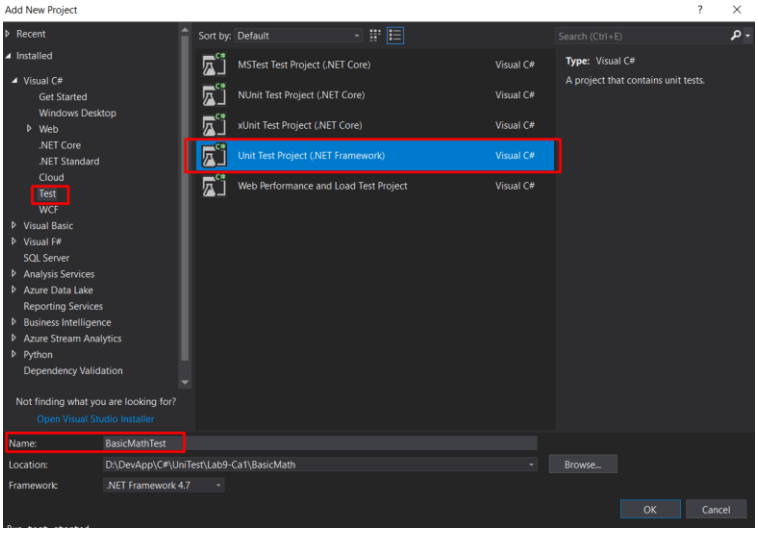
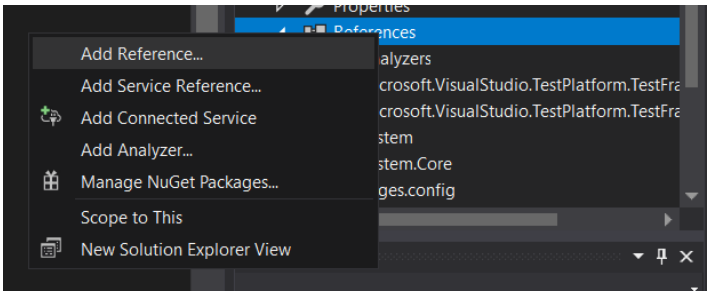
New Solution Folder
BasicMath


Add New Project
Recent
Installed
Visual C#
Get Started
Windows Desktop
Web
.NET Core
.NET Standard
Cloud
Test
WCF
Visual Basic
Visual F#
SQL Server
Analysis Services
Azure Data Lake
Reporting Services
Business Intelligence
Azure Stream Analytics
Python
Dependency Validation
Not finding what you are looking for?
Open Visual Studio Installer
Sort by: Default
MSTest Test Project (.NET Core) Visual C#
NUnit Test Project (.NET Core) Visual C#
xUnit Test Project (.NET Core) Visual C#
Unit Test Project (.NET Framework) Visual C#
Web Performance and Load Test Project Visual C#
Type: Visual C#
A project that contains unit tests.
Name: BasicMathTest
Location: D:\DevApp\C#\UniTest\Lab9-Ca1\BasicMath
Framework: .NET Framework 4.7
Browse...
OK
Cancel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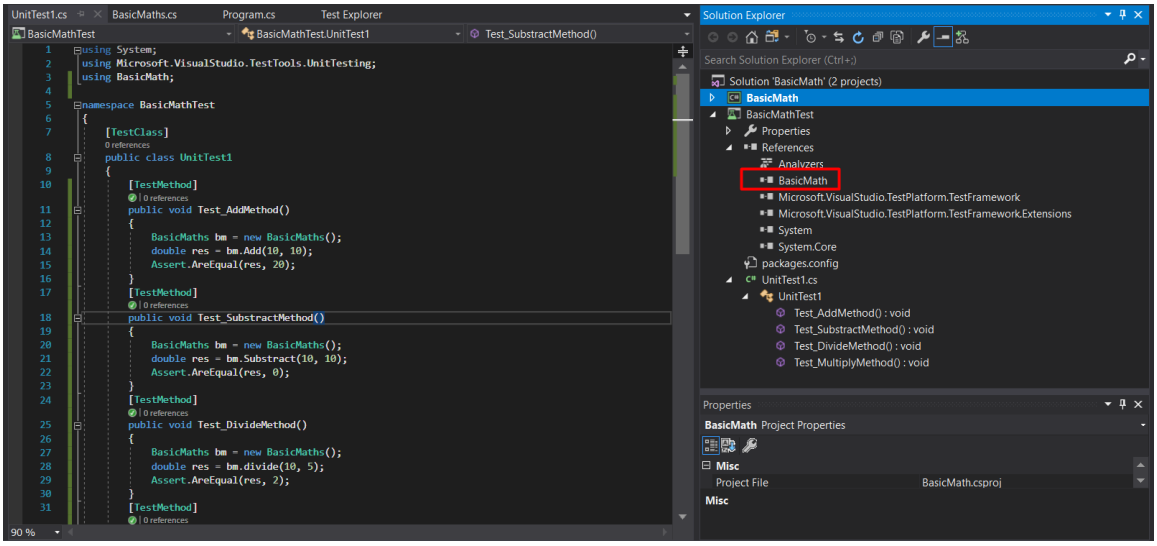
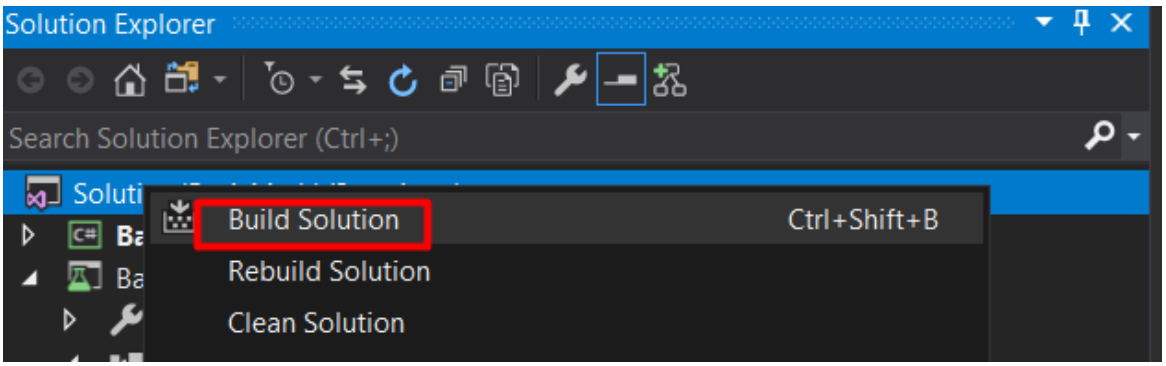
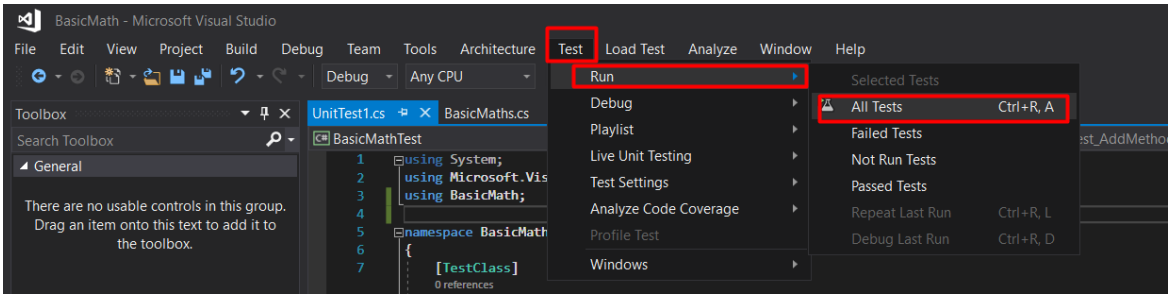
Add Service Reference...
Add Connected Service
Add Analyzer...
Manage NuGet Packages...
Scope to This
New Solution Explorer View



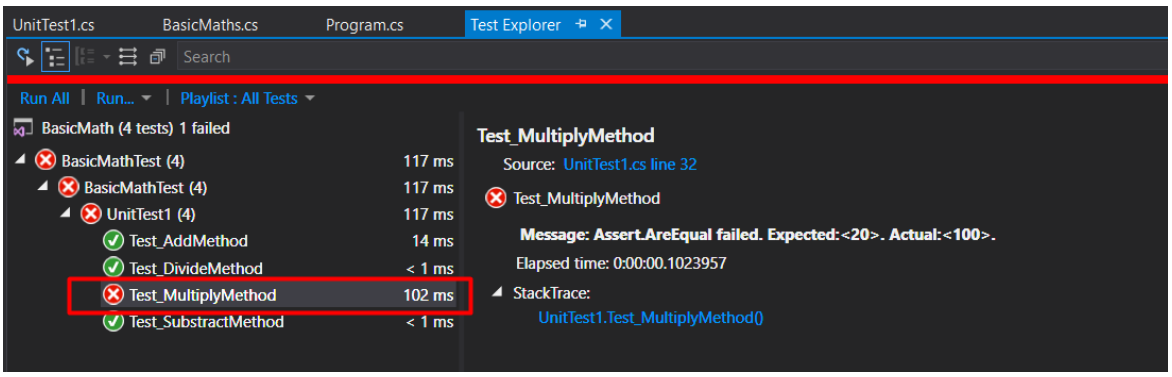
Build Solution:



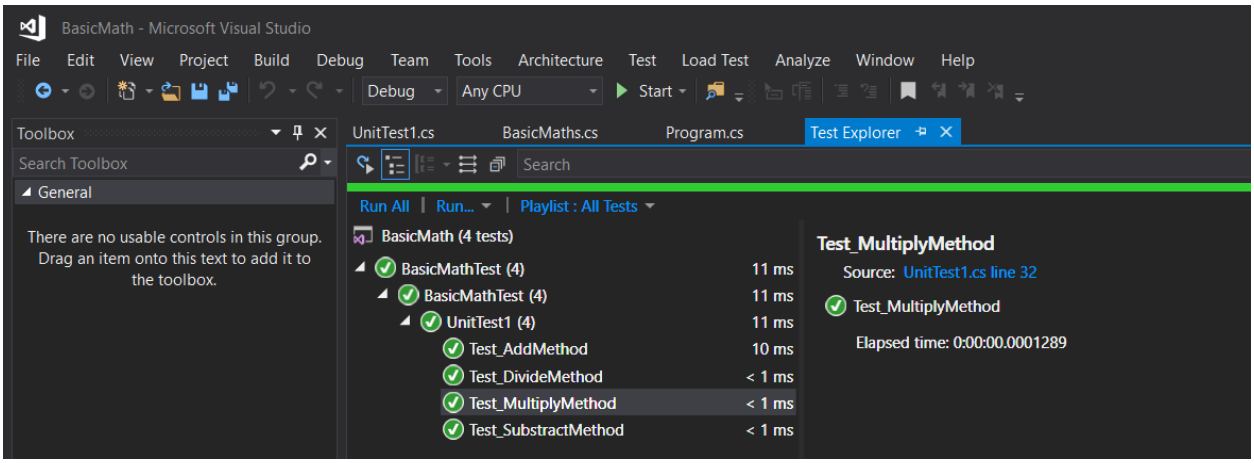
Run Tests:



Wrong at Mutiply method



Correct by replace + with * (on **BasicMaths** method) then Build and Run test again:



Conduct a Test Project for Student as your Homework.

Thank you.

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