

Introduction to VB.Net

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VB.NET

Agenda

- About VB.net
- Installation
- Getting to know the UI of Visual Basic 2017 Express
- First Step
 - Hello World
 - Object & Functions
 - Variables
- Exos

About VB.net



About VB.net

- It is an extremely simple language to:
 - Create programs easily;
 - Develop graphical user interfaces in Windows;
 - Design forms;
 - Managing time;
 - Write to the files;
 - Accessing a database;
 - And subsequently build websites (yes, you heard right!).

- **BASIC:** Beginner's All-purpose Symbolic Instruction Code
- Designed in 1964 by John George Kemeny and Thomas Eugene Kurtz at Dartmouth College in New Hampshire, USA
- Provide computer access to non-science students
- At the time, nearly all use of computers required writing custom software, which was something only scientists and mathematicians tended to do.

About VB.net

- The eight design principles of BASIC are:
 - Be easy to use for beginners (Beginner)
 - Be a general-purpose language (All-purpose)
 - Allow the addition of features for experts (while keeping the language simple for beginners)
 - Be interactive
 - Provide clear error messages and user-friendly
 - Have a low response time for small programs
 - Not require an understanding of computer hardware
 - Isolate the user operating system

About VB.net

- Visual Basic was derived from BASIC and enables the rapid application development (RAD) of graphical user interface (GUI) applications, access to databases using Data Access Objects (DAO), Remote Data Objects (RDO), or ActiveX Data Objects (ADO), and creation of ActiveX controls and objects. Scripting languages such as VBA and VBScript are syntactically similar to Visual Basic, but perform differently.

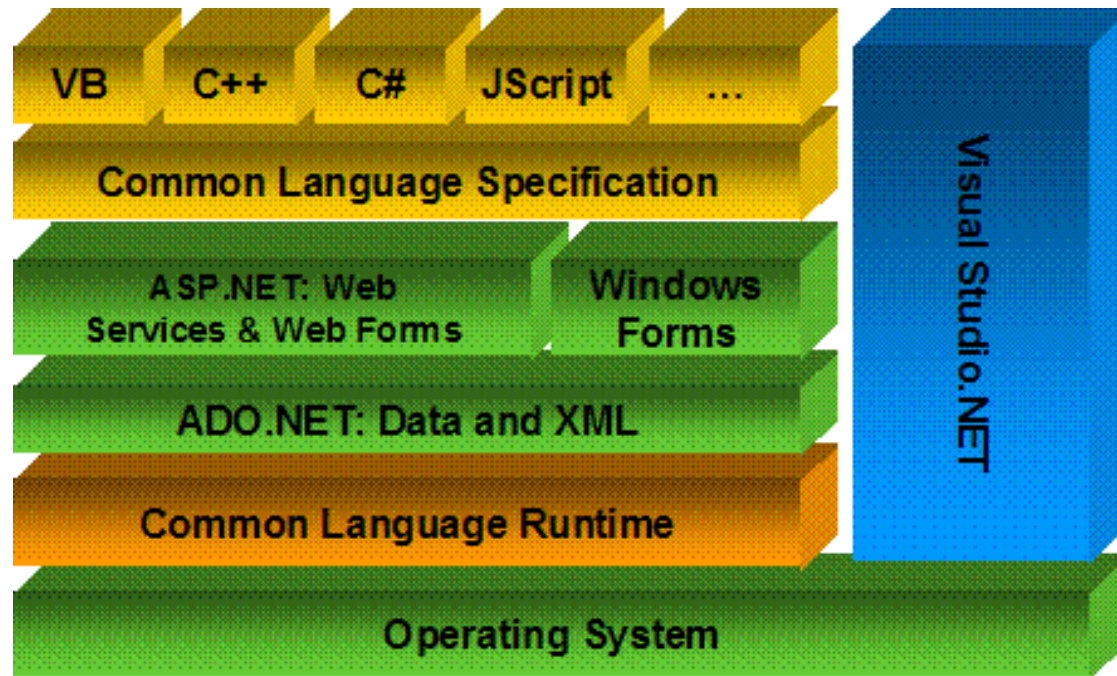
About VB.net

FRAMEWORKS

- A framework (in our case .NET framework from Microsoft) is a kind of immense computer library containing tools that will make the developer's life easier.
- The .NET framework is compatible with Visual Basic and other programming languages such as C#, F#, J#, etc..

About VB.net

FRAMEWORKS



Installation



Getting to know the UI



Start Window

Visual Studio 2022

Open recent

Search recent (Alt+S)



- Today
- Yesterday
- This week
- This month
- Older

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder



Create a new project

Choose a project template with code scaffolding to get started

[Continue without code →](#)

Create a New Project

Create a new project

Recent project templates

- Console App (.NET Framework) Visual Basic

2 Console

1 Visual Basic All platforms All project types

3

- Console App**
A project for creating a command-line application that can run on .NET on Windows, Linux and macOS
Visual Basic Linux macOS Windows Console
- Console App (.NET Framework)**
A project for creating a command-line application
Visual Basic Windows Console

Other results based on your search

- Console App**
A project for creating a command-line application that can run on .NET on Windows, Linux and macOS
C# Linux macOS Windows Console
- TypeScript Console Application**
A basic TypeScript Console application template which can be run with your local node installation.
TypeScript Web
- JavaScript Console Application**
A basic JavaScript Console application template which can be run with your local node installation.

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Back Next

Create a New Project

Configure your new project

Console App (.NET Framework) Visual Basic Windows Console

Project name
operator_number

Location
C:\Users\nasri\OneDrive\Desktop\VB_PROJECT\

Solution
Create new solution

Solution name ⓘ
operator_number

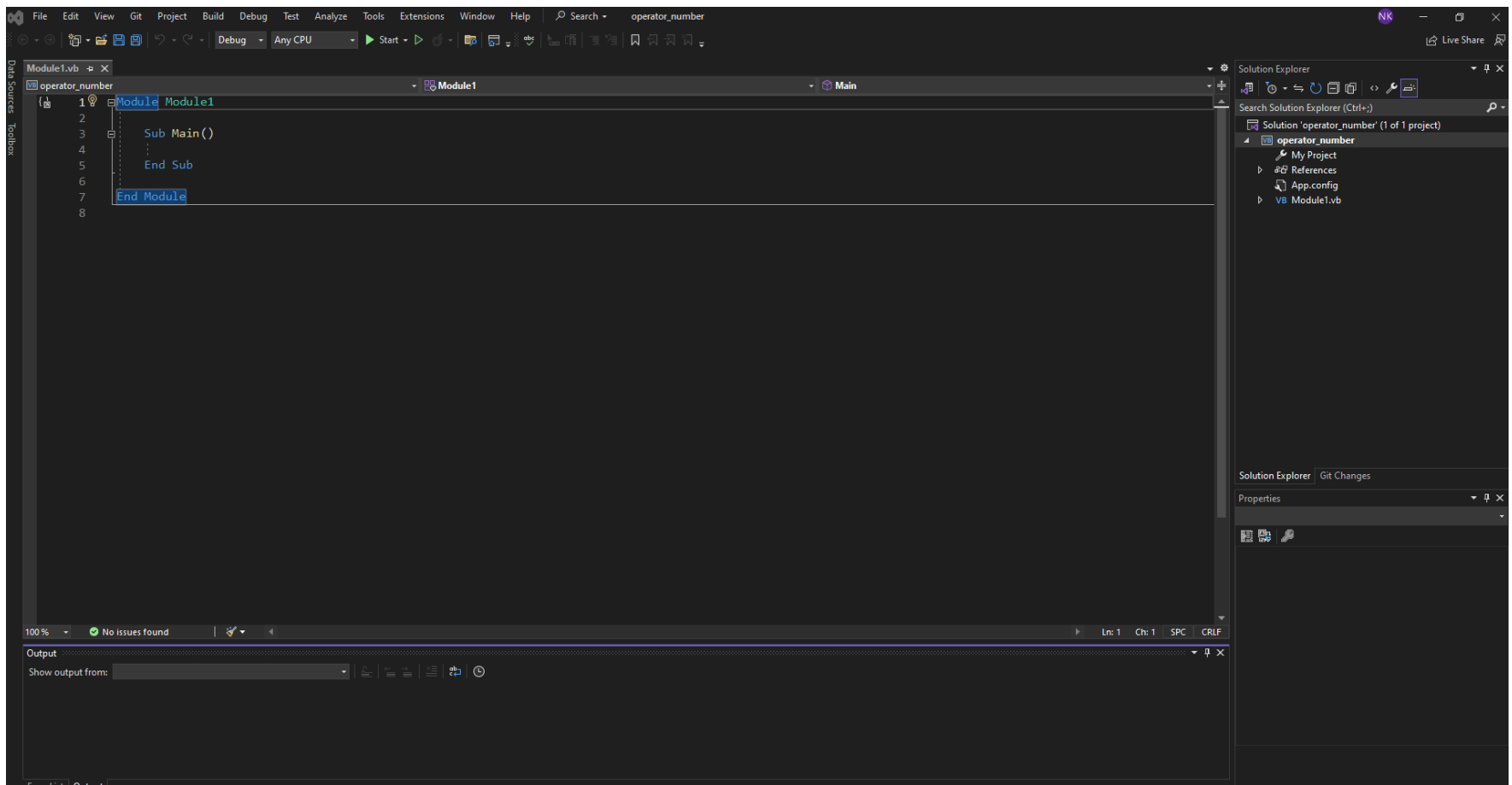
☒ Place solution and project in the same directory

Framework
.NET Framework 4.7.2

Project will be created in "C:\Users\nasri\OneDrive\Desktop\VB_PROJECT\operator_number\"

Back Create

Create a New Project



What you should know

- Work Space
 - Create windows, enter lines of code
- Toolbox
 - More useful for graphical part of the course.
- Solution Explorer
 - Tree of the project and DB manager
- Properties
 - Modify object's proprieties

First Step



Hello World

```
Module Module1
```

```
    Sub Main()
```

```
    End Sub
```

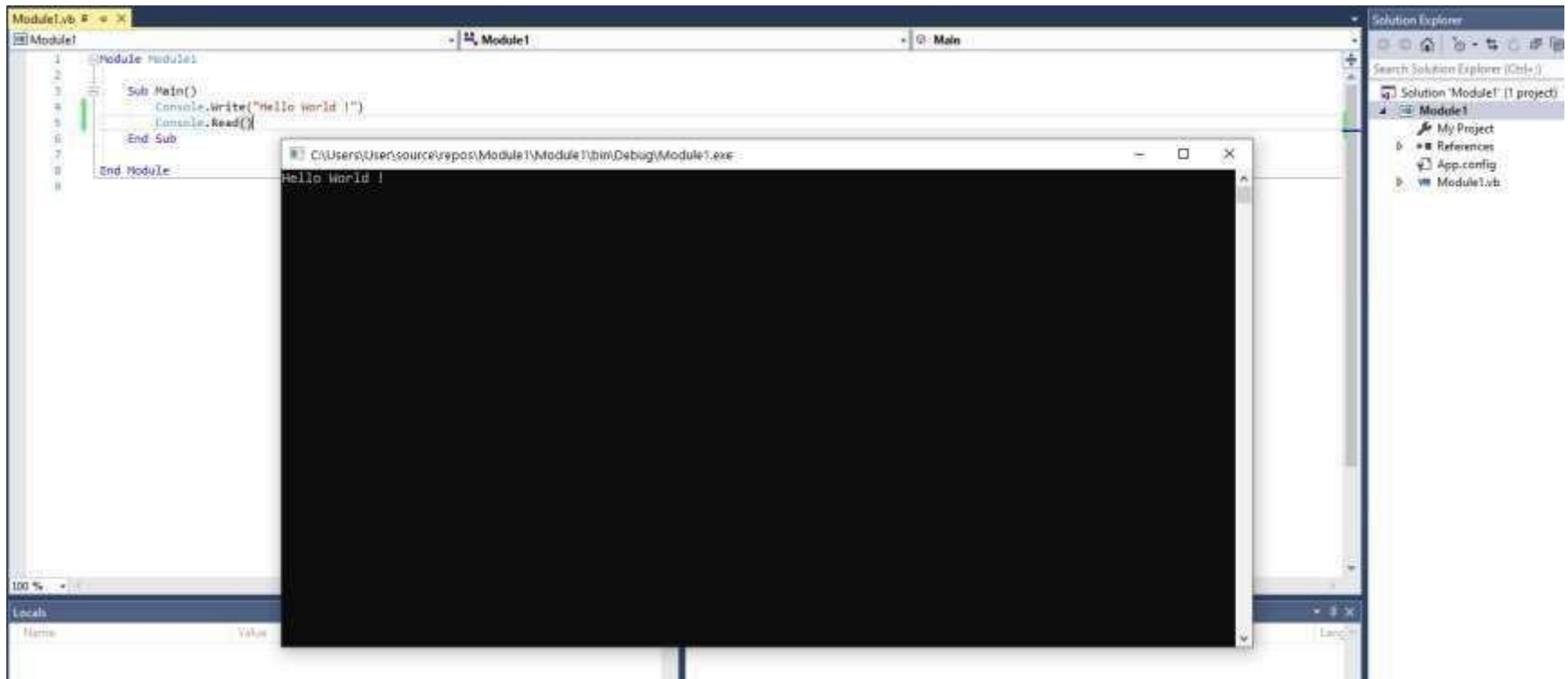
```
End Module
```

```
Console.WriteLine("Hello World !")
```

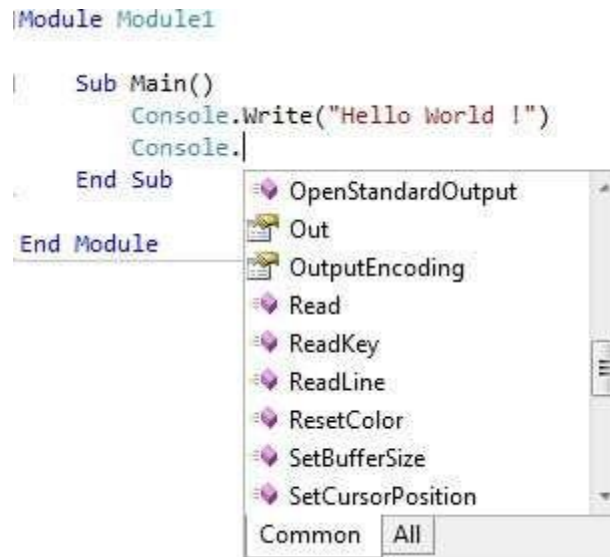
```
Console.Read()
```

```
Hello world !
```

Hello World



Objects - Functions



Objects - Functions

OBJECTS

- helps organize our code
- OOP

FUNCTIONS

- A function is a sequence of existing code designed for a definite effect
- Write Once, Use Many Times

Variables

Store virtually anything you want, such as numbers, sentences, tables, etc..

Types:

BOOLEAN	DOUBLE
BYTE	SINGLE
CHAR	INTEGER
DATE	LONG
DECIMAL	OBJECT

Variables

```
Module Module1
```

```
    Sub Main()
```

```
        Dim variable AS Integer
```

```
        variable = 5
```

```
        Console.Write(variable)
```

```
        Console.Read()
```

```
    End Sub
```

```
End Module
```

Variables Operations

Operation	Symbole
Add	+
Sub	-
Multiplication	*
Division	/
Integer Division	\
Modulus	Mod
Exponentiation	^

Variables Operations

Try to multiply 9×8

Comments

`'This is a comment`

`To do a comment use a single quote.`

Line Break

Console.Write("test")

Console.Write("test")

Console.WriteLine("test")

Console.WriteLine("test")

Read input

```
Console.ReadLine()
```

Exo

1- Ask the user to provide two input values.

Then, execute various mathematical operations on these values in both orders, such as

$1 + 2 = 3$ and $2 + 1 = 3$.

Present the results in an organized manner with a clear descriptions, like:

=====

The sum of num1 (value) and num2 (value) is equal to (result).

=====

Separate each operation's output from the next with a horizontal line,

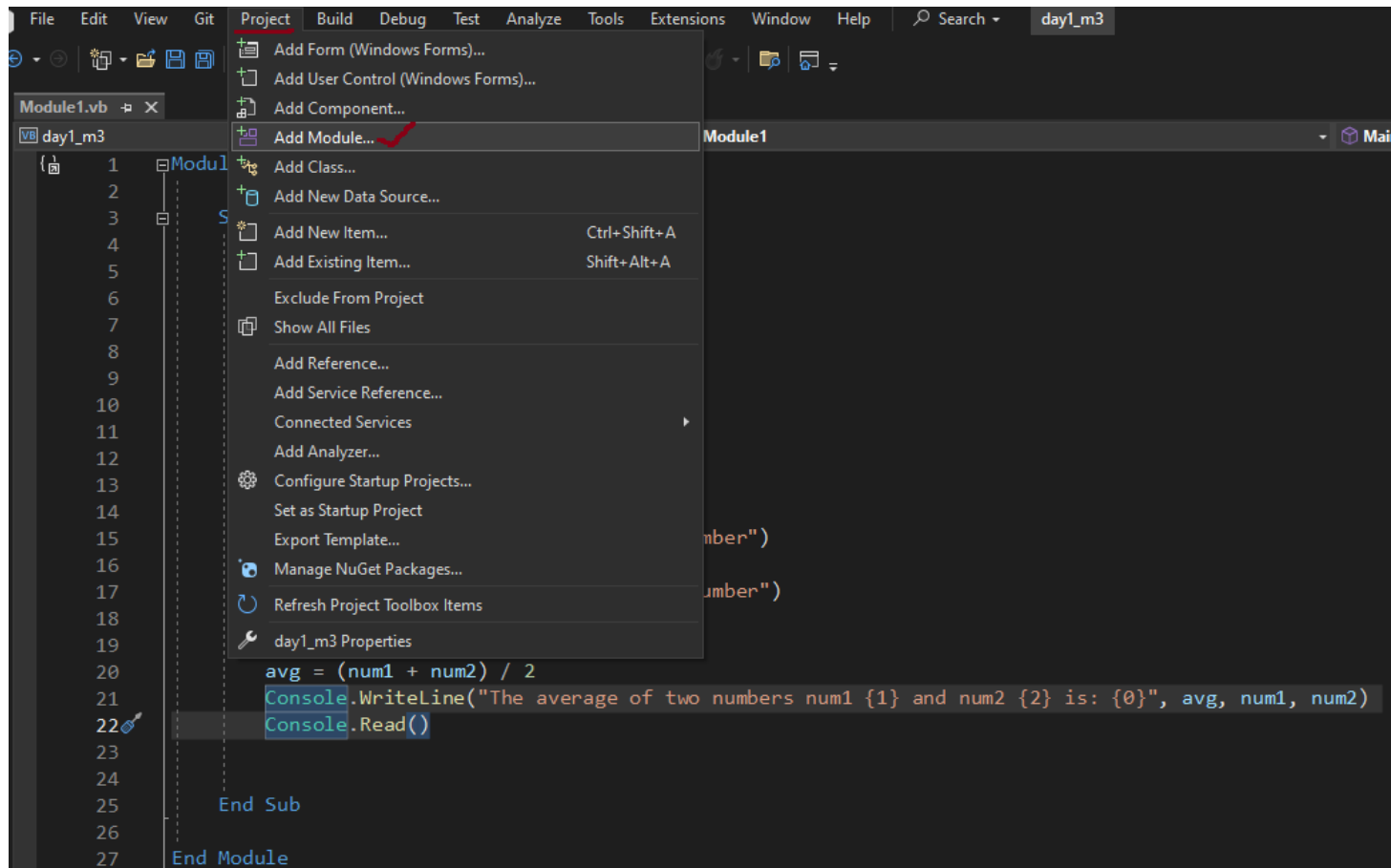
and repeat this process for all mathematical operations.

Exo

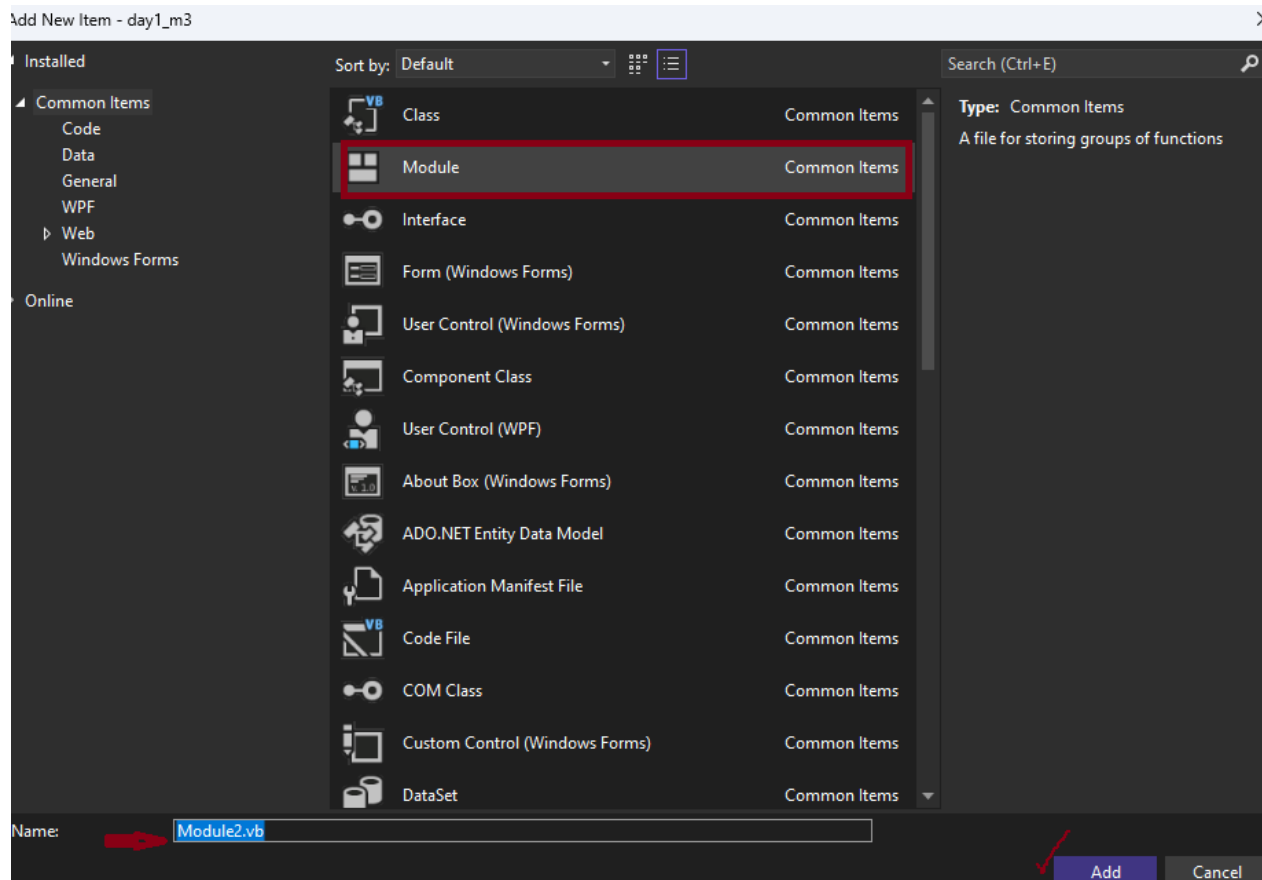
2- Remember the temperature application back in JavaScript?

Ask the user for a temperature in Fahrenheit and convert it to Celcius and then as another temperature in Celcius and convert it to Fahrenheit

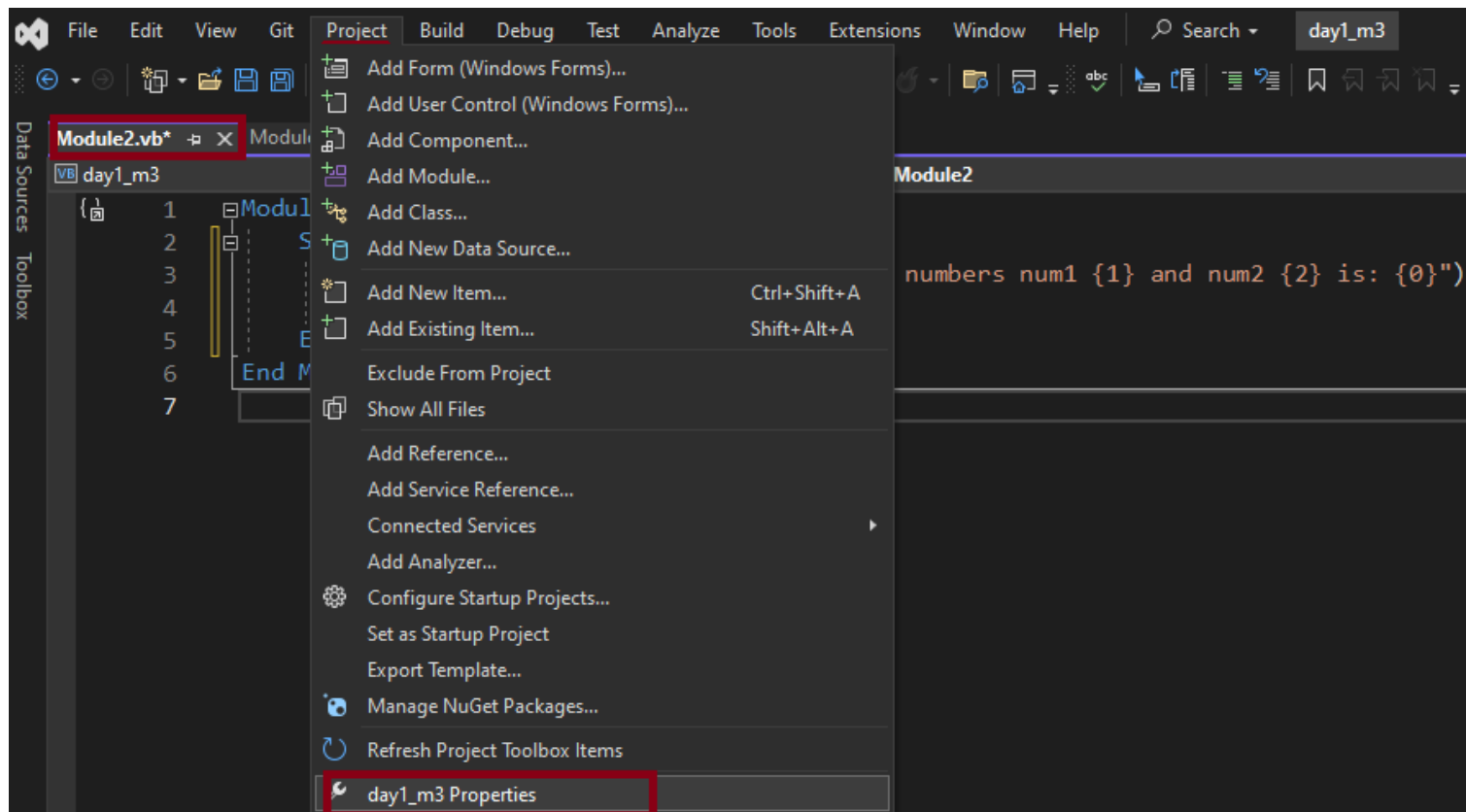
Add Module



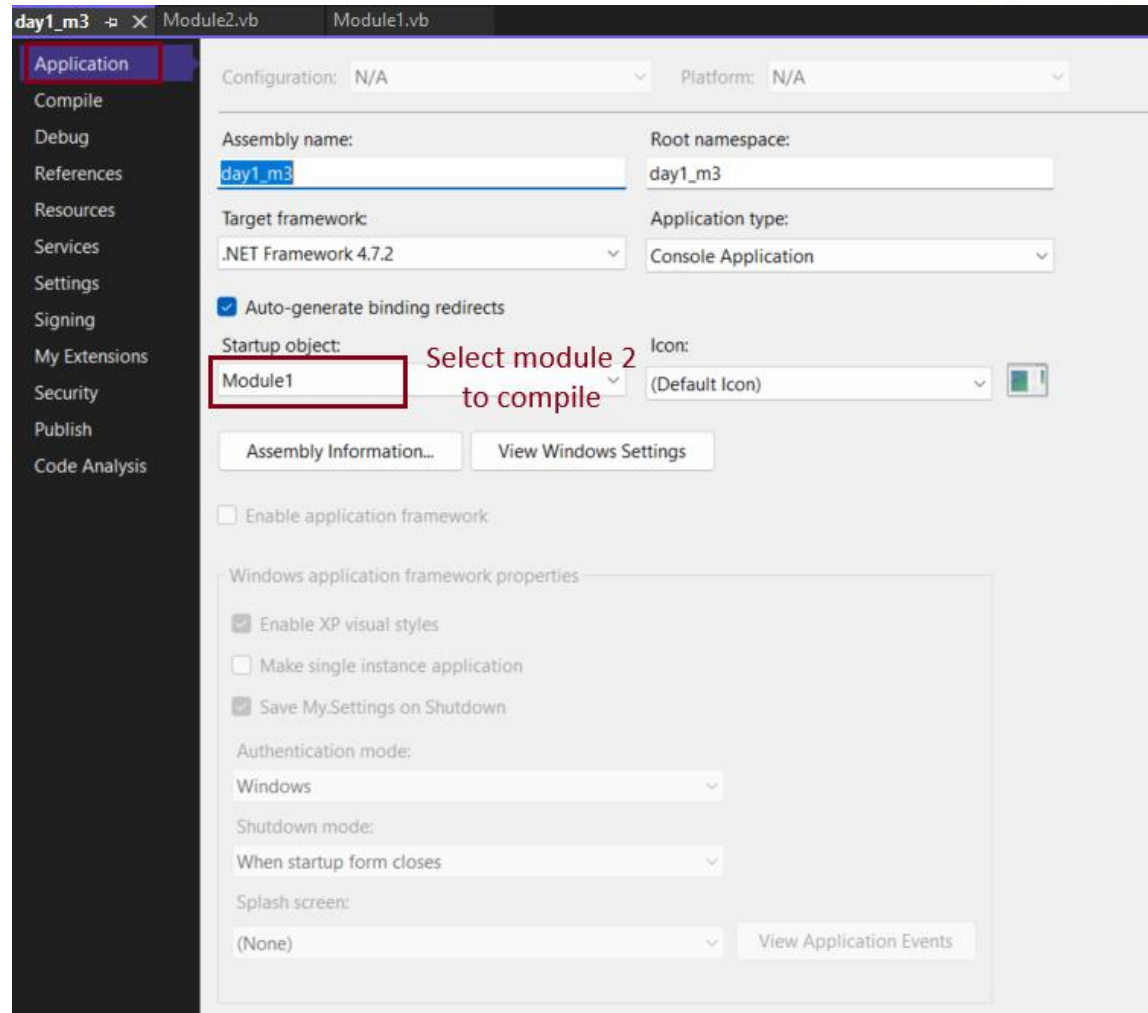
Add Module



Compile Module 2



Compile Module 2



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THE END