Lab: C# Intro and Basic Syntax

Problems for exercises and homework for the "Programming Fundamentals Extended" course @ SoftUni.

Problem 1. Greeting

Write a program, which greets the user by their name, which it reads from the console.

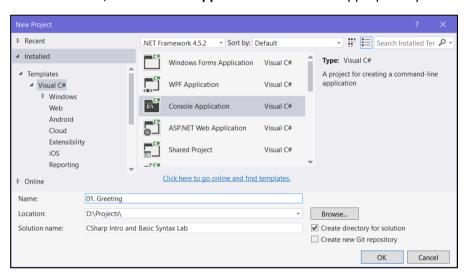
Step 1. Create a New C# Project, using Visual Studio

Open Visual Studio and create a new project by going into [File > New > Project]:



After that, the project creation window will open.

Select Visual C#, then Console Application and name it appropriately:



Step 2. Write the Program Logic

A new file opens in the editor, which looks like this:

```
C# 01. Greeting
                                                 ⊡using System;
           using System.Collections.Generic;
           using System.Linq;
     4
           using System.Text;
           using System.Threading.Tasks;
          □ namespace _01.Greeting
               class Program
    10
                   static void Main(string[] args)
    11
    12
    13
    14
    15
               }
    16
```

















Let's write the program logic. We want to read a name and then print that name with some additional text on the console. To accomplish this, we'll use Console.ReadLine() and Console.WriteLine():

```
    □ 01. Greeting

                                           1
            using System;
      2
      3
           namespace _01.Greeting
      4
            {
      5
                 class Program
      6
      7
                     static void Main(string[] args)
      8
      9
                         var name = Console.ReadLine();
                         Console.WriteLine("Hello, {0}!", name);
     10
     11
                 }
     12
            }
     13
     14
```

Step 3. Test the Program

After we wrote the program logic, we can **start** our program, using **[Ctrl+F5]**:

```
C# 01. Greeting

→ 

Main(string[] args)

Angle (args)

Main(string[] args)

Angle (args)

Main(string[] args)

Main(string[] 
                                                                                                                                                     using System;
                                                                          1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C:\WINDOWS\system32\cmd.exe
                                                                                                                                       □namespace _01.Greeting
                                                                                                                                                                                                               class Program
                                                                                                                                                                                                                                                                  static void Main(s
                                                                          8
                                                                          9
                                                                                                                                                                                                                                                                                                                  var name = Cor
                                                              10
                                                                                                                                                                                                                                                                                                                Console.WriteL
                                                            11
                                                              12
                                                            13
                                                            14
```

Let's type in a name and see if it works:

```
C:\WINDOWS\system32\cmd.exe
Ivan
Hello, Ivan!
Press any key to continue . . .
```

If you followed all the steps correctly, you should be greeted by your program! Submit the code in Judge and test if it works correctly.

















Examples

Input	Output	
Pesho	Hello,	Pesho!
Ivan	Hello,	Ivan!
Merry	Hello,	Merry!

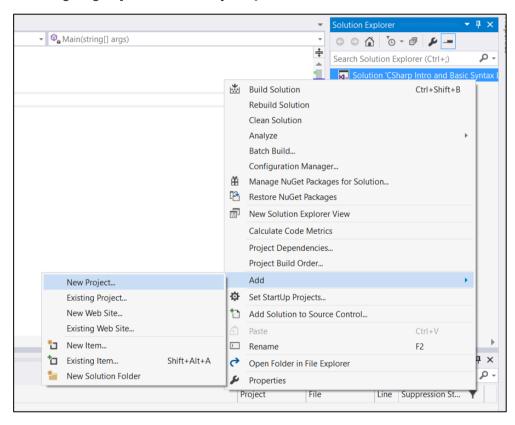
Problem 2. Add Two Numbers

Write a program, which reads 2 whole numbers and adds them together. Then, print them in the following format:

a + b = sum'

Step 1. Create a New C# Project Inside the Solution

In Visual Studio, create a new project in our current solution by right clicking the solution in the Solution Explorer and navigating to [Add → New Project...]:



After that, name it appropriately and hit [OK]:







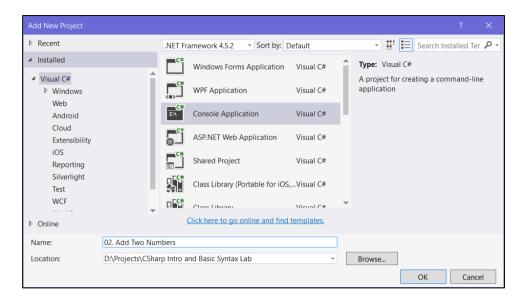






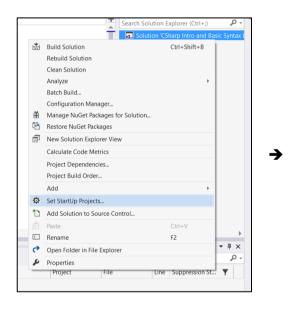


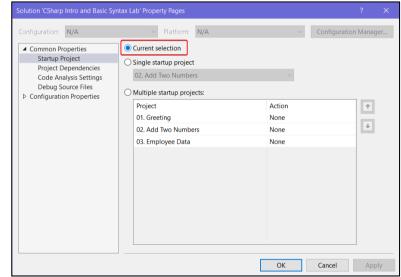




Step 2. Change the Startup Project

Now that you've created a new project inside the solution, you need to set the startup project to the currently selected project, otherwise whenever you hit [Ctrl+F5], the previous problem will start. So right click the solution and hit "Set Startup Projects":





Now we're ready to write our logic.

Examples

Input	Output	
2 5	2 + 5 = 7	
1 3	1 + 3 = 4	
-3 5	-3 + 5 = 2	





















Problem 3. Employee Data

Write a program to read **data** about an **employee** and print it on the console with the appropriate formatting. The order the input comes in is as such:

- Name **no** formatting
- Age **no** formatting
- Employee ID **8-digit padding** (employee id 356 is 00000356)
- Monthly Salary formatted to **2 decimal places** (2345.56789 becomes 2345.56)

Examples

Input	Output
Ivan	Name: Ivan
24	Age: 24
1192	Employee ID: 00001192
1500.353	Salary: 1500.35
Peter	Name: Peter
30	Age: 30
113236	Employee ID: 00113236
1738.1112	Salary: 1738.11
Naiden	Name: Naiden
27	Age: 27
1111222	Employee ID: 01111222
3560	Salary: 3560.00

Hints

• You can use "D" and "F" to format numbers in C#. You can read more about formatting strings here.















