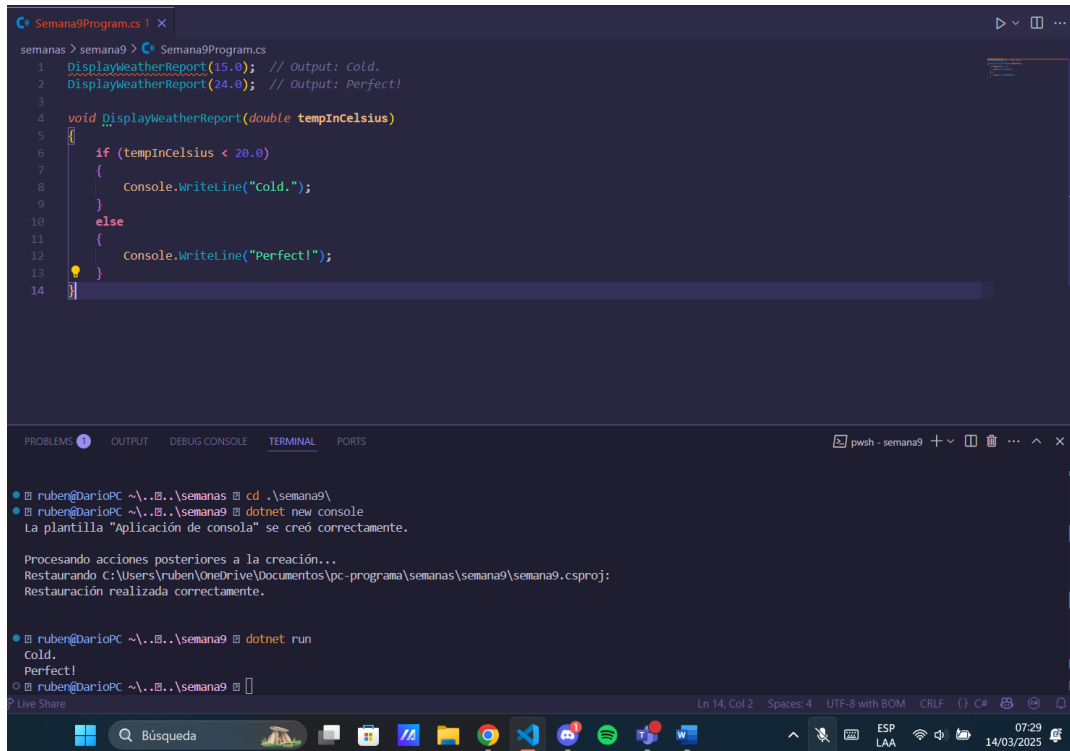


Semana 9 Rubén Darío Paredes Flores 1152225

1. Instrucción de selección if



```
Semana9Program.cs 1 x
semanas > semana9 > Semana9Program.cs
1  DisplayWeatherReport(15.0); // Output: Cold.
2  DisplayWeatherReport(24.0); // Output: Perfect!
3
4  void DisplayWeatherReport(double tempInCelsius)
5  {
6      if (tempInCelsius < 20.0)
7      {
8          Console.WriteLine("Cold.");
9      }
10     else
11     {
12         Console.WriteLine("Perfect!");
13     }
14 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

ruben@DarioPC ~\..\..\semanas > cd ..\semanas\

ruben@DarioPC ~\..\..\semanas > dotnet new console

La plantilla "Aplicación de consola" se creó correctamente.

Procesando acciones posteriores a la creación...

Restaurando C:\Users\ruben\OneDrive\Documents\pc-programa\semanas\semana9\semana9.csproj:

Restauración realizada correctamente.

ruben@DarioPC ~\..\..\semana9 > dotnet run

Cold.

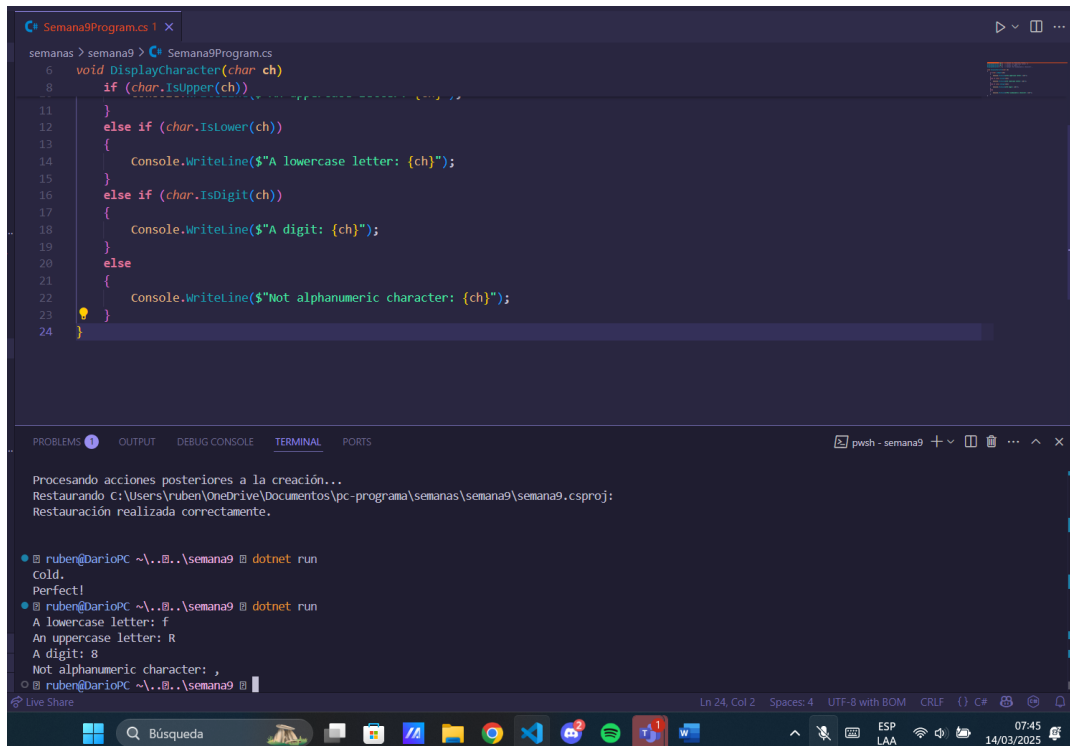
Perfect!

ruben@DarioPC ~\..\..\semana9 >

Live Share

Ln 14, Col 2 Spaces: 4 UTF-8 with BOM CRLF C# 07:29 14/03/2025

2. Else if



```
Semana9Program.cs 1 x
semanas > semana9 > Semana9Program.cs
6  void DisplayCharacter(char ch)
8  {
9      if (char.IsUpper(ch))
10     {
11     }
12     else if (char.IsLower(ch))
13     {
14         Console.WriteLine($"A lowercase letter: {ch}");
15     }
16     else if (char.IsDigit(ch))
17     {
18         Console.WriteLine($"A digit: {ch}");
19     }
20     else
21     {
22         Console.WriteLine($"Not alphanumeric character: {ch}");
23     }
24 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

Procesando acciones posteriores a la creación...

Restaurando C:\Users\ruben\OneDrive\Documents\pc-programa\semanas\semana9\semana9.csproj:

Restauración realizada correctamente.

ruben@DarioPC ~\..\..\semana9 > dotnet run

Cold.

Perfect!

ruben@DarioPC ~\..\..\semana9 > dotnet run

A lowercase letter: f

An uppercase letter: R

A digit: 8

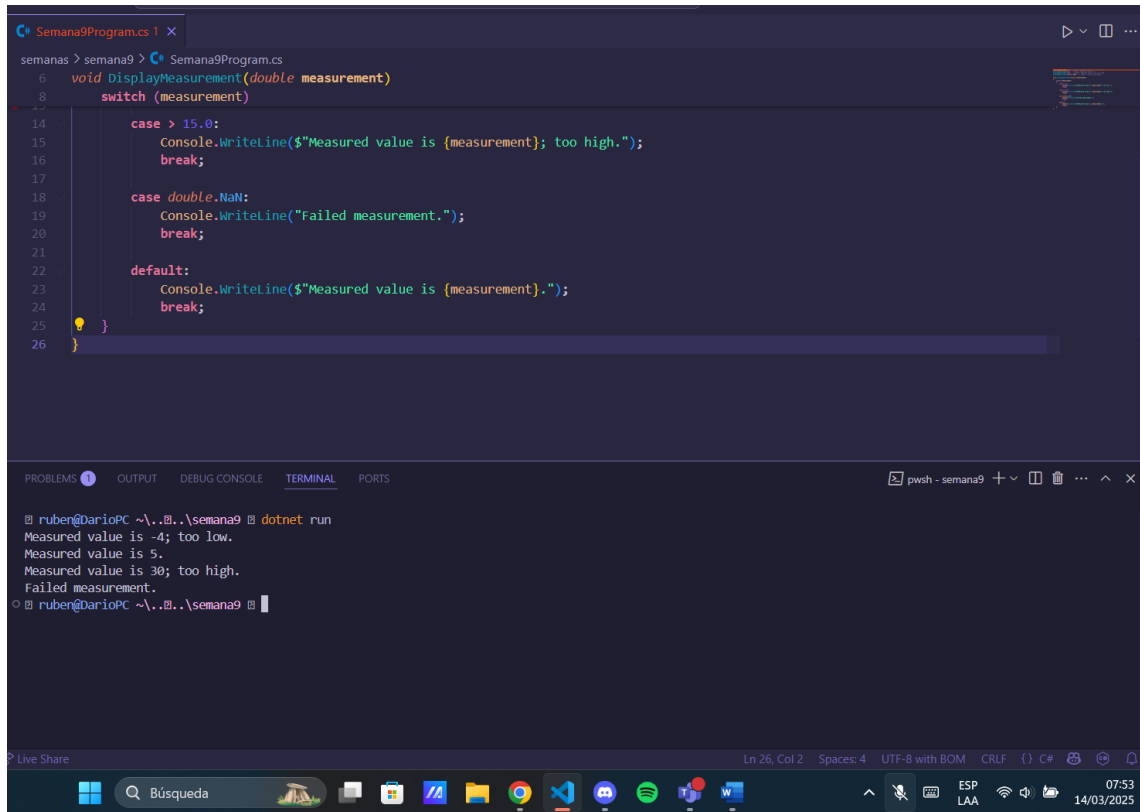
Not alphanumeric character: ,

ruben@DarioPC ~\..\..\semana9 >

Live Share

Ln 24, Col 2 Spaces: 4 UTF-8 with BOM CRLF C# 07:45 14/03/2025

3. Switch

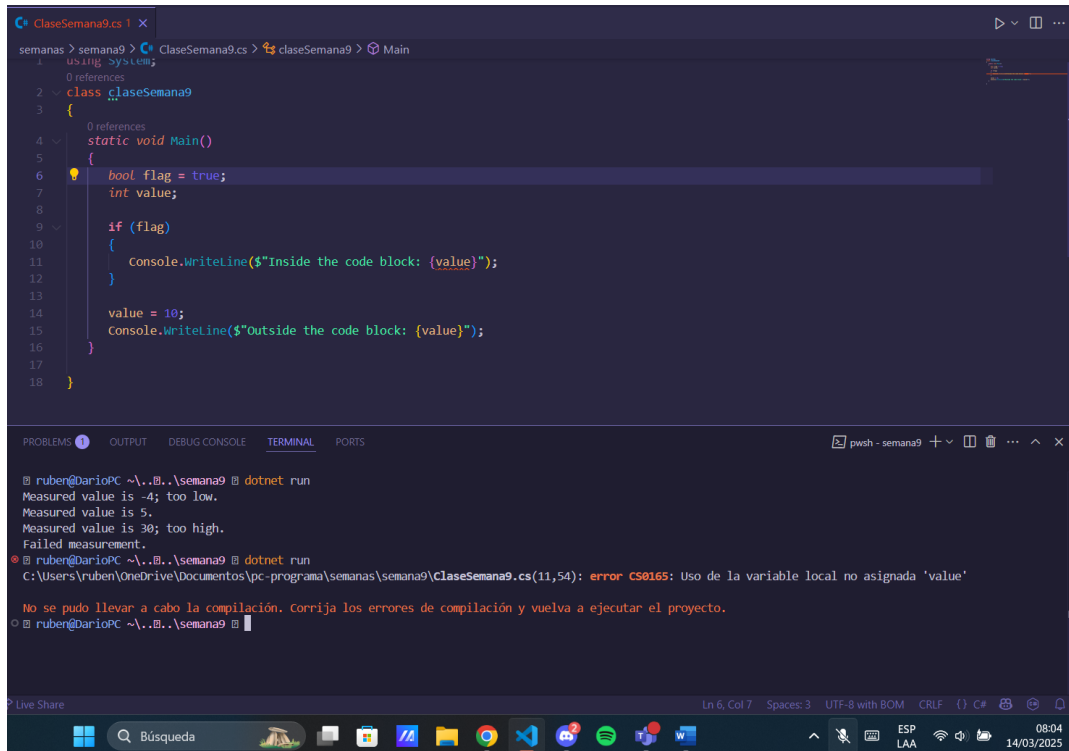


The screenshot shows a Visual Studio editor with a C# file named `Semana9Program.cs`. The code defines a `DisplayMeasurement` method that uses a `switch` statement to handle different measurement values. The switch statement has three cases: `> 15.0`, `double.NaN`, and a `default` case. Each case prints a message to the console and then breaks. The terminal window shows the output of the program, which matches the expected behavior of the switch statement.

```
void DisplayMeasurement(double measurement)
{
    switch (measurement)
    {
        case > 15.0:
            Console.WriteLine($"Measured value is {measurement}; too high.");
            break;
        case double.NaN:
            Console.WriteLine("Failed measurement.");
            break;
        default:
            Console.WriteLine($"Measured value is {measurement}.");
            break;
    }
}
```

```
ruben@DarioPC ~\..B..\semana9 dotnet run
Measured value is -4; too low.
Measured value is 5.
Measured value is 30; too high.
Failed measurement.
```

4. Variable scope



The screenshot shows a Visual Studio editor with a C# file named `ClaseSemana9.cs`. The code defines a `ClaseSemana9` class with a `Main` method. Inside the `Main` method, there is a `bool` variable `flag` and an `int` variable `value`. The `flag` variable is used in an `if` statement to print a message. The `value` variable is assigned a value of 10 and then used in another `Console.WriteLine` statement. The terminal window shows the output of the program, which matches the expected behavior of the code. However, there is a compilation error in the `Main` method, which is highlighted in red. The error message is: `error CS0165: Uso de la variable local no asignada 'value'`. The error message indicates that the `value` variable is used before it is assigned a value. The error message is: `error CS0165: Uso de la variable local no asignada 'value'`. The error message is: `error CS0165: Uso de la variable local no asignada 'value'`.

```
using System;
class ClaseSemana9
{
    static void Main()
    {
        bool flag = true;
        int value;
        if (flag)
        {
            Console.WriteLine($"Inside the code block: {value}");
        }
        value = 10;
        Console.WriteLine($"Outside the code block: {value}");
    }
}
```

```
ruben@DarioPC ~\..B..\semana9 dotnet run
Measured value is -4; too low.
Measured value is 5.
Measured value is 30; too high.
Failed measurement.
C:\Users\ruben\OneDrive\documentos\pc-programa\semanas\semana9\ClaseSemana9.cs(11,54): error CS0165: Uso de la variable local no asignada 'value'
No se pudo llevar a cabo la compilación. corrija los errores de compilación y vuelva a ejecutar el proyecto.
```

```
ClaseSemana9.cs X
semanas > semana9 > ClaseSemana9.cs > *ClaseSemana9 > Main
1 using System;
2 class ClaseSemana9
3 {
4     0 references
5     static void Main()
6     {
7         bool flag = true;
8         int value = 0;
9
10        if (flag)
11        {
12            Console.WriteLine($"Inside the code block: {value}");
13        }
14
15        value = 10;
16        Console.WriteLine($"Outside the code block: {value}");
17    }
18 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
pwrsh - semana9 + - X

ruben@DarioPC ~\..\semana9 dotnet run
Measured value is -4; too low.
Measured value is 5.
Measured value is 30; too high.
Failed measurement.
ruben@DarioPC ~\..\semana9 dotnet run
C:\Users\ruben\OneDrive\Documentos\pc-programa\semanas\semana9\ClaseSemana9.cs(11,54): error CS0165: Uso de la variable local no asignada 'value'

No se pudo llevar a cabo la compilación. Corrija los errores de compilación y vuelva a ejecutar el proyecto.
ruben@DarioPC ~\..\semana9 dotnet run
Inside the code block: 0
Outside the code block: 10
ruben@DarioPC ~\..\semana9
```

5. Variable scope si funciona

Para ayudar a evitar errores de runtime, el compilador de C# analiza el código en el editor de Visual Studio Code y durante el proceso de compilación. Sin embargo, es posible que el compilador no siempre interprete el código de la misma manera que usted.

Considere los siguientes dos ejemplos de código que parecen tener el mismo propósito:

```
Copiar
c#
// Code sample 1
bool flag = true;
int value;

if (flag)
{
    value = 10;
    Console.WriteLine($"Inside the code block: {value}");
}

Console.WriteLine($"Outside the code block: {value}");

Copiar
c#
// Code sample 2
int value;

if (true)
{
    value = 10;
    Console.WriteLine($"Inside the code block: {value}");
}

Console.WriteLine($"Outside the code block: {value}");
```

6. Eliminación bloque de código

```
ClaseSemanas9.cs X
semanas > semana9 > ClaseSemanas9.cs > claseSemanas9 > Main
1 using System;
2 class ClaseSemanas9
3 {
4     static void Main()
5     {
6         bool flag = true;
7         if (flag)
8         {
9             Console.WriteLine(flag);
10        }
11    }
12 }
13 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
pwsh - semana9 + - - - - -

Measured value is -4; too low.
Measured value is 5.
Measured value is 30; too high.
Failed measurement.
❌ ruben@DarioPC ~\..\semana9 dotnet run
C:\Users\ruben\OneDrive\Documentos\pc-programa\semanas\semana9\ClaseSemanas9.cs(11,54): error CS0165: Usado de la variable local no asignada 'value'

No se pudo llevar a cabo la compilación. Corrija los errores de compilación y vuelva a ejecutar el proyecto.
❌ ruben@DarioPC ~\..\semana9 dotnet run
Inside the code block: 0
Outside the code block: 10
❌ ruben@DarioPC ~\..\semana9 dotnet run
True
❌ ruben@DarioPC ~\..\semana9 dotnet run
True
Live Share
Ln 11, Col 54 Spaces: 3 UTF-8 with BOM CRLF {} C# 08:46 14/03/2025
```

```
ClaseSemanas9.cs X
semanas > semana9 > ClaseSemanas9.cs > claseSemanas9 > Main
1 using System;
2 class ClaseSemanas9
3 {
4     static void Main()
5     {
6         bool flag = true;
7         if (flag)
8         {
9             Console.WriteLine(flag);
10        }
11    }
12 }
13 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
pwsh - semana9 + - - - - -

Measured value is 30; too high.
Failed measurement.
❌ ruben@DarioPC ~\..\semana9 dotnet run
C:\Users\ruben\OneDrive\Documentos\pc-programa\semanas\semana9\ClaseSemanas9.cs(11,34): error CS0165: Usado de la variable local no asignada 'value'

No se pudo llevar a cabo la compilación. Corrija los errores de compilación y vuelva a ejecutar el proyecto.
❌ ruben@DarioPC ~\..\semana9 dotnet run
Inside the code block: 0
Outside the code block: 10
❌ ruben@DarioPC ~\..\semana9 dotnet run
True
❌ ruben@DarioPC ~\..\semana9 dotnet run
True
❌ ruben@DarioPC ~\..\semana9 dotnet run
True
Live Share
Ln 11, Col 34 Spaces: 3 UTF-8 with BOM CRLF {} C# 08:46 14/03/2025
```

ClaseSemana9.cs

semanas > semana9 > ClaseSemana9.cs > claseSemana9 > Main

```
1 using System;
2 class ClaseSemana9
3 {
4     static void Main()
5     {
6         string name = "steve";
7         if (name == "bob") Console.WriteLine("Found Bob");
8         else if (name == "steve") Console.WriteLine("Found Steve");
9         else Console.WriteLine("Found Chuck");
10    }
11
12 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

pwsh - semana9

C:\Users\ruben\OneDrive\Documentos\pc-programa\semanas\semana9\ClaseSemana9.cs(11,54): error CS0165: Uso de la variable local no asignada 'value'

No se pudo llevar a cabo la compilación. Corrija los errores de compilación y vuelva a ejecutar el proyecto.

ruben@DarioPC ~\..\semana9 dotnet run

Inside the code block: 0

Outside the code block: 10

ruben@DarioPC ~\..\semana9 dotnet run

True

ruben@DarioPC ~\..\semana9 dotnet run

True

ruben@DarioPC ~\..\semana9

ruben@DarioPC ~\..\semana9 dotnet run

Found Steve

ruben@DarioPC ~\..\semana9

Ln 10, Col 5 Spaces: 3 UTF-8 with BOM CRLF {} C#

Búsqueda

ESP LAA

08:47 14/03/2025