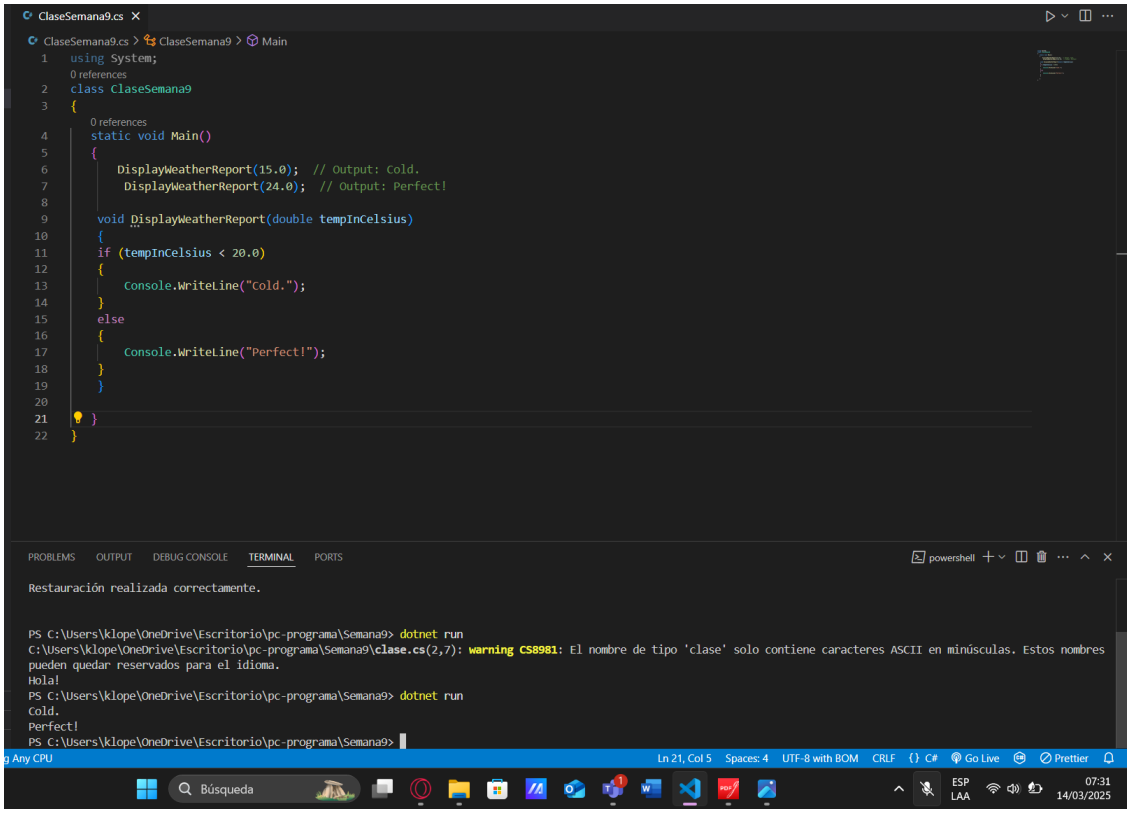
Universidad Rafael Landívar.
Facultad de Ingeniera.
Licenciatura en Ingeniera en Informática y Sistemas.
Pensamiento Computacional
Docente: Ing. Luis Rojas

Actividad 3 -Semana 9

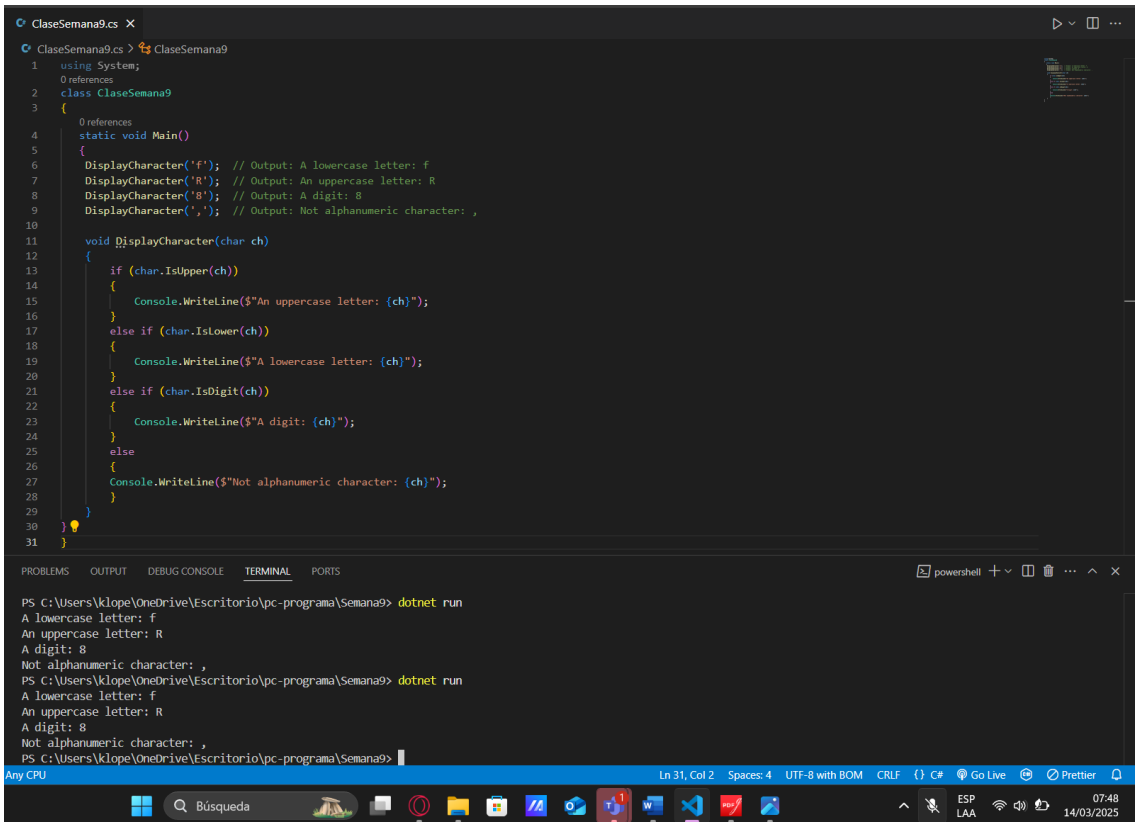
Estudiante: López Castillo, Kenneth Isaías Yahid
Carné: 1138025

Guatemala, 14 de marzo de 2025

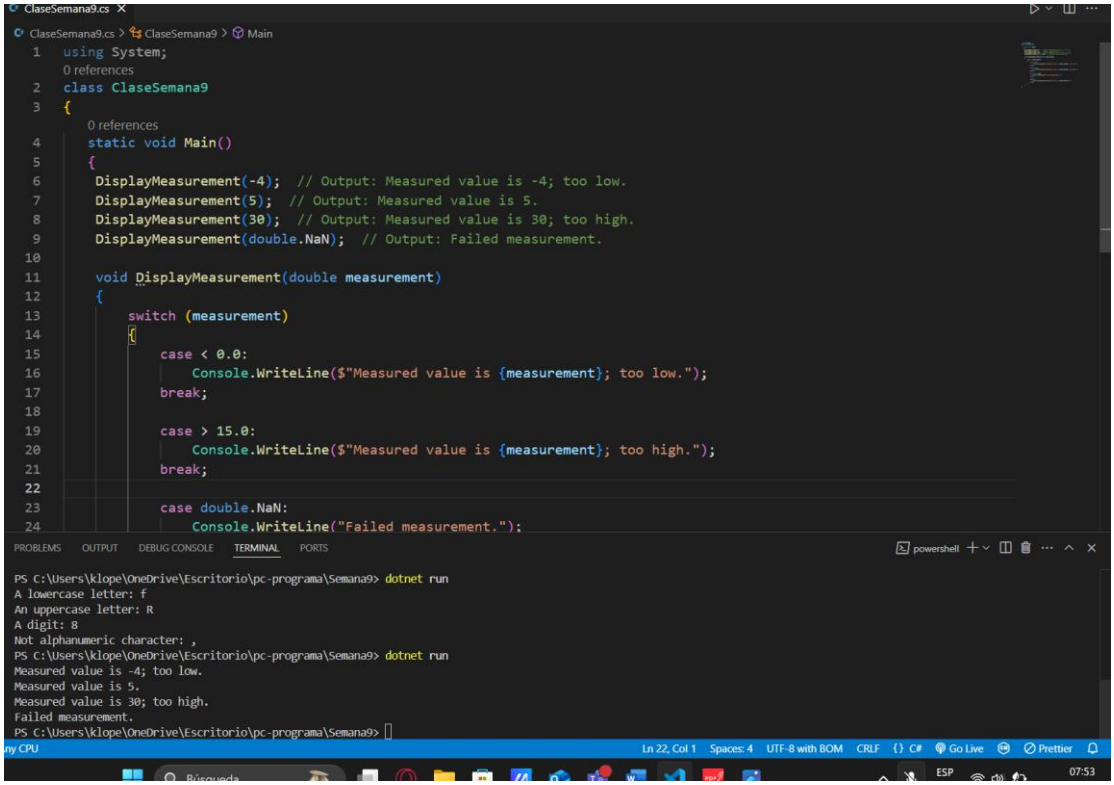
1. If-else



2. Else if



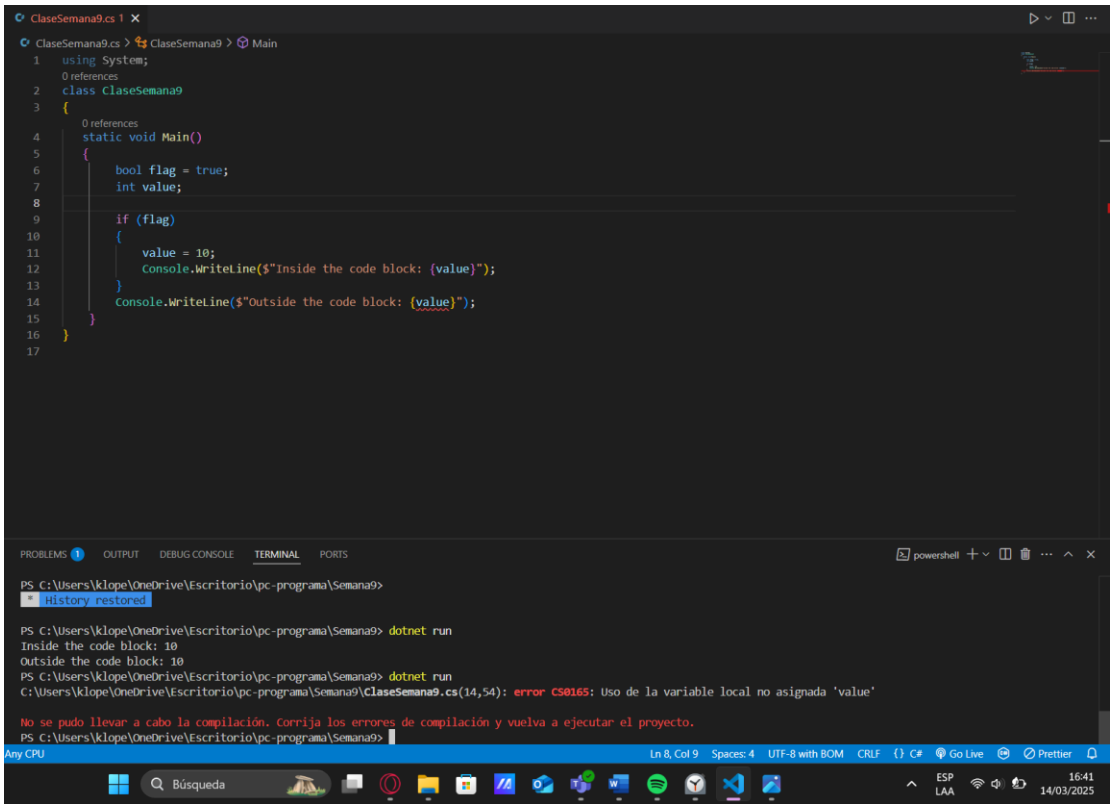
3. Switch



```
using System;
0 references
class ClaseSemana9
{
    0 references
    static void Main()
    {
     DisplayMeasurement(-4);  // Output: Measured value is -4; too low.
     DisplayMeasurement(5);  // Output: Measured value is 5.
     DisplayMeasurement(30);  // Output: Measured value is 30; too high.
     DisplayMeasurement(double.NaN);  // Output: Failed measurement.

     void DisplayMeasurement(double measurement)
     {
         switch (measurement)
         {
             case < 0.0:
                 Console.WriteLine($"Measured value is {measurement}; too low.");
             break;

             case > 15.0:
                 Console.WriteLine($"Measured value is {measurement}; too high.");
             break;

             case double.NaN:
                 Console.WriteLine("Failed measurement.");
```

```
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9> dotnet run
A lowercase letter: f
An uppercase letter: R
A digit: 8
Not alphanumeric character: ,
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9> dotnet run
Measured value is -4; too low.
Measured value is 5.
Measured value is 30; too high.
Failed measurement.
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9>
```

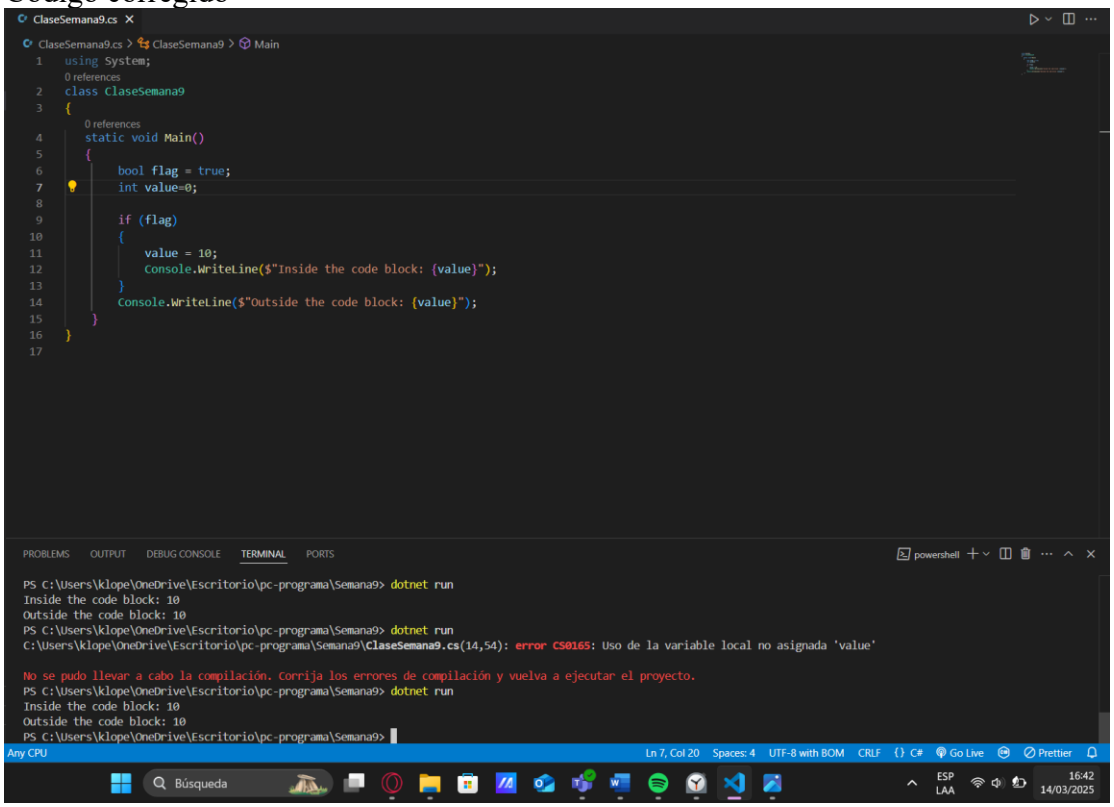
4. Declaración de variables



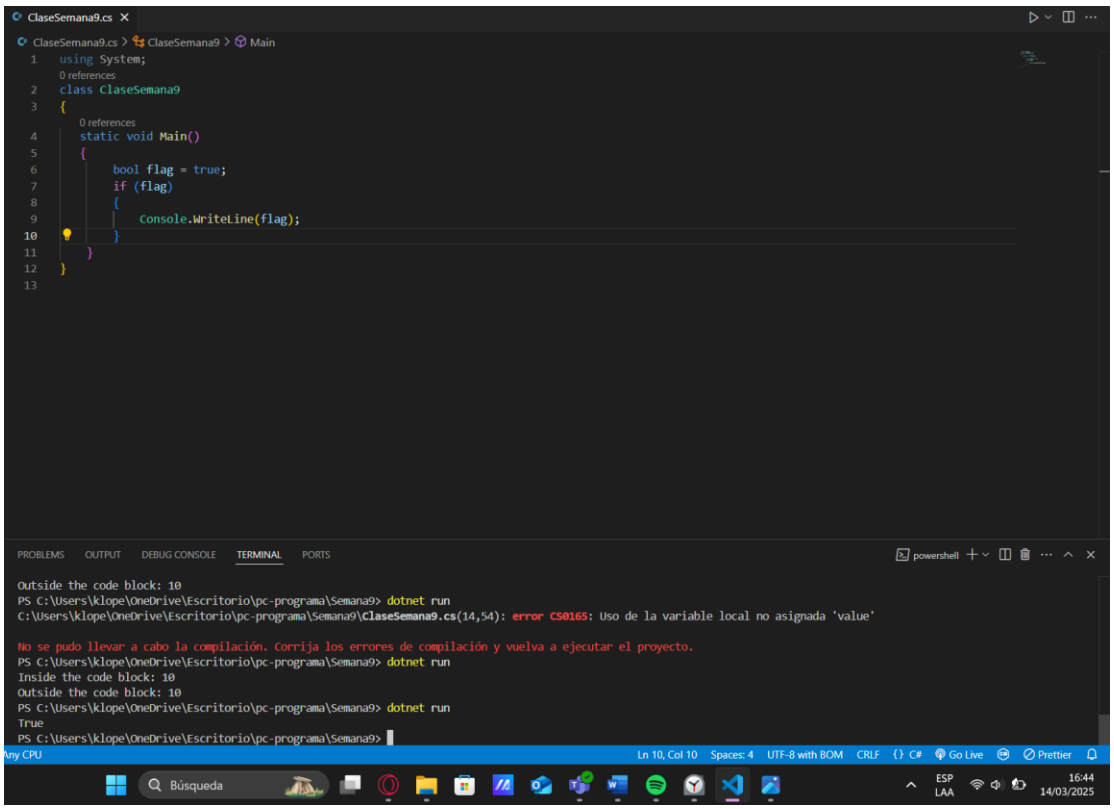
```
using System;
0 references
class ClaseSemana9
{
    0 references
    static void Main()
    {
        bool flag = true;
        int value;

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

```
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9>
* History restored

PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9> dotnet run
Inside the code block: 10
Outside the code block: 10
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9> dotnet run
C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9\ClaseSemana9.cs(14,54): 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.
PS C:\Users\klope\OneDrive\Escritorio\pc-programa\Semana9>
```

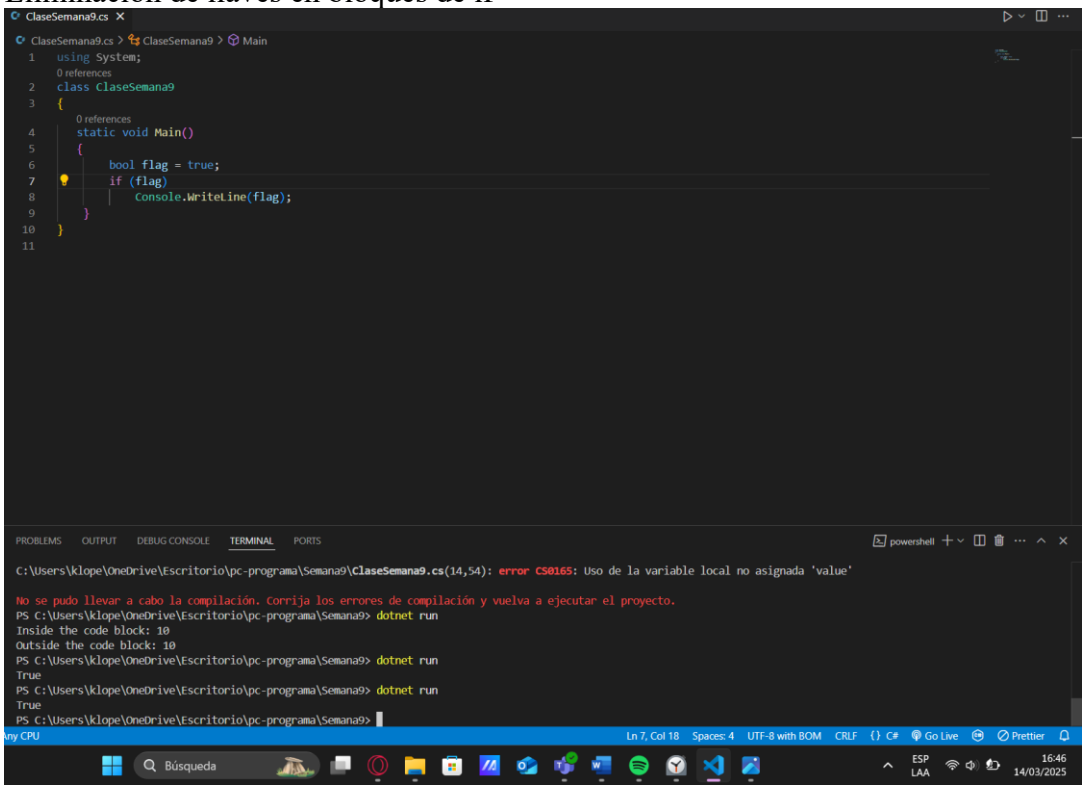
5. Código corregido



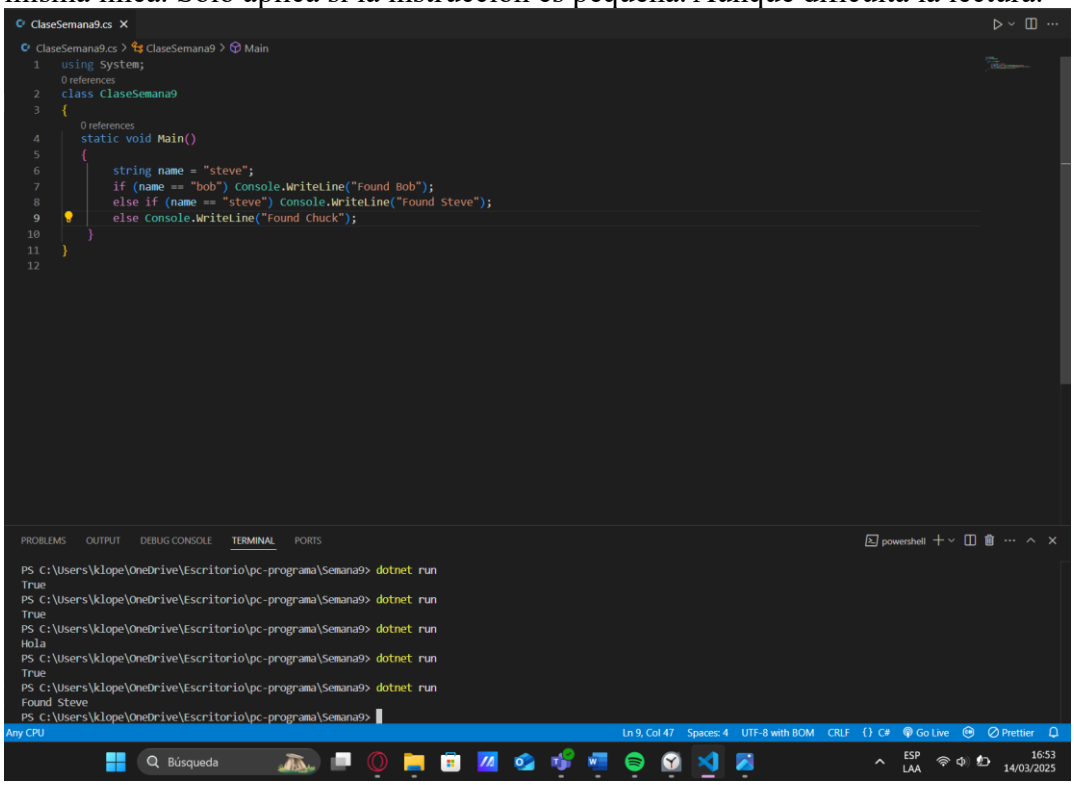
6. Valores booleanos con if



7. Eliminación de llaves en bloques de if



8. Instrucción de if en una sola línea
   Debido a que la instrucción en el if en este caso es pequeña se puede poner todo en una misma línea. Solo aplica si la instrucción es pequeña. Aunque dificulta la lectura.



9. Orden correcto de código