

1- It will = \$30.00 when the code {X + Y:C}

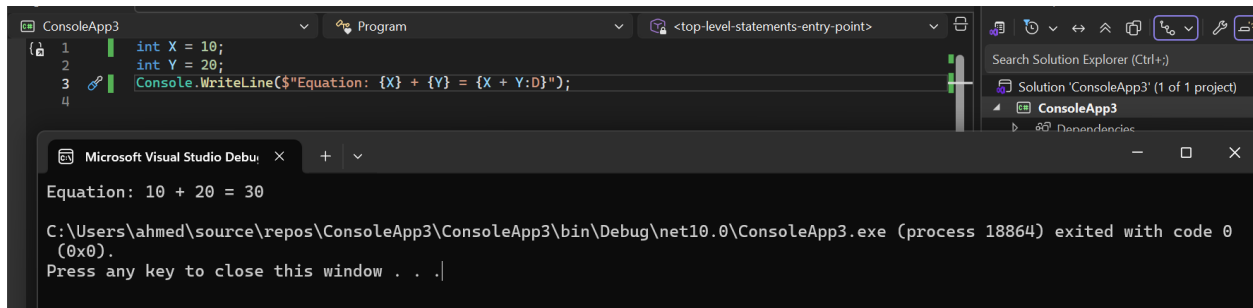
The Specifier :C tells the program to format that number as a currency.

2- Its benefit using standard format specifiers like :C offers three major benefits over typing the symbols manually:

- Localization (Global Compatibility): If this code is run on a computer in the UK, it will automatically output £30.00. If run in Europe, it might output 30,00 €. You do not have to write different code for different countries; the specifier handles it automatically.
- Consistency: It ensures all money values look the same (e.g., always two decimal places). It prevents errors like displaying \$30 in one place and \$30.00001 in another.
- Readability: It adds commas for large numbers automatically. \$1,000,000.00 is much easier to read than \$1000000.

3- Another examples Screen shots

Specifier :D



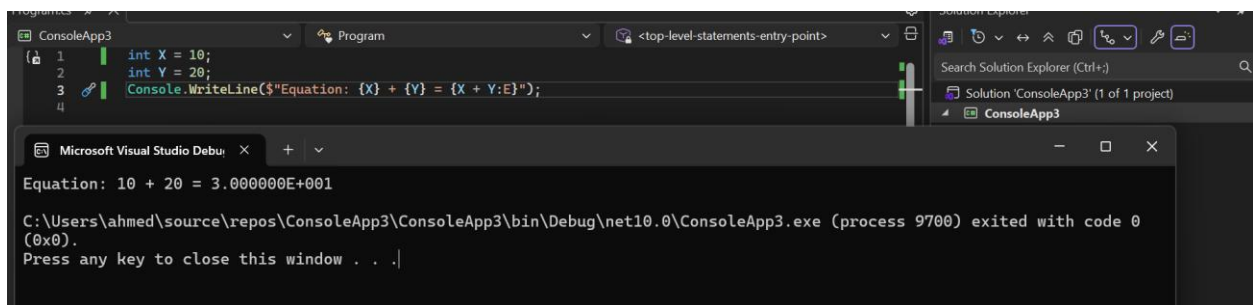
The screenshot shows a Visual Studio IDE with a C# console application named 'ConsoleApp3'. The code in the editor is as follows:

```
1 int X = 10;  
2 int Y = 20;  
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:D}*");  
4
```

The output window shows the result of running the program:

```
Equation: 10 + 20 = 30  
C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 18864) exited with code 0 (0x0).  
Press any key to close this window . . .|
```

Specifier :E



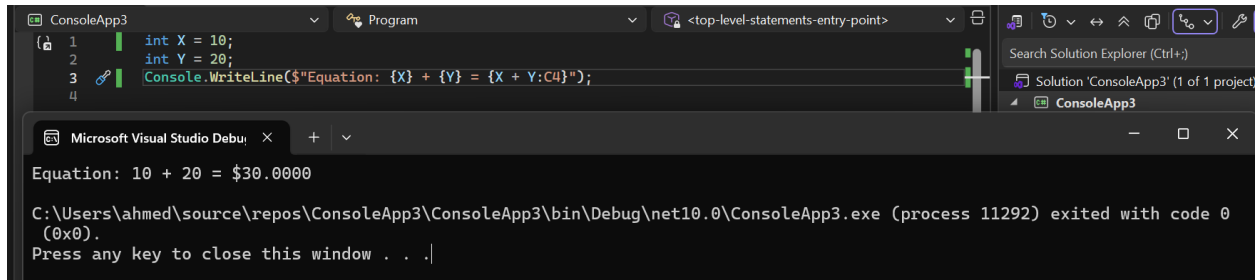
The screenshot shows the same Visual Studio IDE setup as the previous one, but with the format specifier changed to :E. The code in the editor is:

```
1 int X = 10;  
2 int Y = 20;  
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:E}*");  
4
```

The output window shows the result of running the program:

```
Equation: 10 + 20 = 3.000000E+001  
C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 9700) exited with code 0 (0x0).  
Press any key to close this window . . .|
```

Specifier :C4



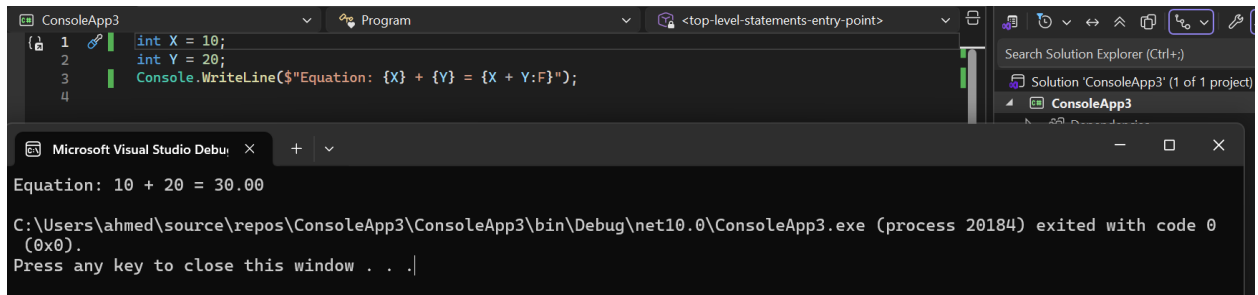
```
1 int X = 10;
2 int Y = 20;
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:C4}");
```

Equation: 10 + 20 = 30.0000

C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 11292) exited with code 0 (0x0).

Press any key to close this window . . .|

Specifier :F



```
1 int X = 10;
2 int Y = 20;
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:F}");
```

Equation: 10 + 20 = 30.00

C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 20184) exited with code 0 (0x0).

Press any key to close this window . . .|

Specifier :P



```
1 int X = 10;
2 int Y = 20;
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:P}");
```

Equation: 10 + 20 = 3,000.00%

C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 1124) exited with code 0 (0x0).

Press any key to close this window . . .|

Specifier :N0



```
1 int X = 10;
2 int Y = 20;
3 Console.WriteLine($"Equation: {X} + {Y} = {X + Y:N0}");
```

Equation: 10 + 20 = 30

C:\Users\ahmed\source\repos\ConsoleApp3\ConsoleApp3\bin\Debug\net10.0\ConsoleApp3.exe (process 14628) exited with code 0 (0x0).

Press any key to close this window . . .|