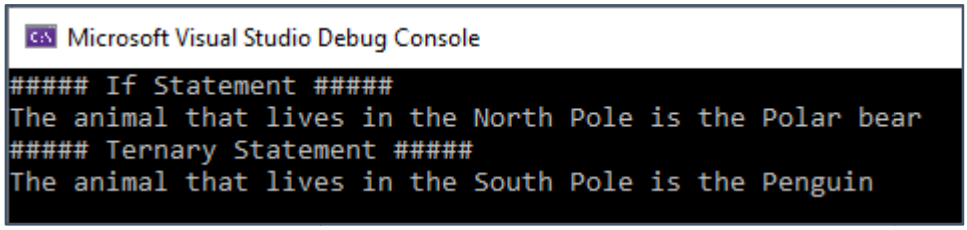
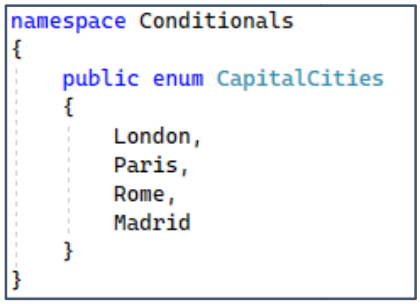
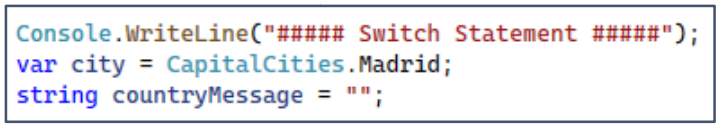
Conditionals

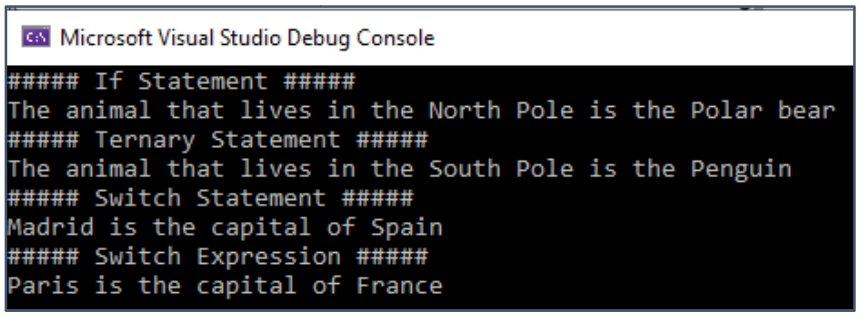
The objective of this exercise is to consolidate your understanding of conditional statements, including the if statement, the ternary statement, switch statements, and switch expressions.

1	Create a new **console** project called **Conditionals** in: **{installedFolder}\Labs\04_Conditionals\Begin**
2	Delete the contents of **Program.cs**.

3	Add an **enum** to the project in a file called **Pole.cs**.
	
	`namespace Conditionals`
	`{`
	`  public enum Pole`
	`  {`
	`  North,`
	`  South`
	`  }`
	`}`

4	In **Program.cs**, declare a variable called **pole** and assign it the value of **Pole.North**. Fix any issues using Visual Studio Quick Actions and Refactorings (**Ctrl+dot**). Create a second variable of type **string**, called **animal**. Write an **if statement** that tests whether the value of pole is equal to North and if true, assigns the value of **'Polar bear'** to the **animal** variable. Otherwise, assign the value **'Penguin'** to the animal variable.
5	Output a message to the console: **Console.WriteLine($"The animal that lives in the {pole} Pole is the {animal}");** Run the app and confirm the logic works as expected.
6	Now assign the value of **Pole.South** to your **pole** variable and perform the same conditional test using the **ternary statement**.

7	Output a message to the console: **Console.WriteLine($"The animal that lives in the {pole} Pole is the {animal}");** Run the app and confirm the logic works as expected. You should now have two outputs: 
8	You will now practise with *switch statements* and *switch expressions*. Add an **enum** to the project called **CapitalCities**: 
9	In **Program.cs**, declare and initialise the following variables: 
10	Write a **switch statement** that switches on the **city** value against the four values in the enumeration. Within each block, assign a message to the **countryMessage** variable: **countryMessage = $"{city} is the capital of France";**
11	Add a default case label and after the switch statement, output the following: **Console.WriteLine(countryMessage);**

12	Now see if you can achieve the same behaviour with a **switch expression**. Assign the value of **Paris** to the **city** variable *before* the switch expression and output a message to the console *after* the switch expression.
13	When you have completed your code, run the program. You should now have the following output: 
14	A suggested solution is provided in the **End** folder for your reference.