# 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.

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| 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.** |
| 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. |