## **Introduction to Conditional Statements**

We make decisions all the time in our life based on different conditions. Are you going to drink tea or coffee? Study history or biology? Buy a new shirt or save your money?

We can program computers to make decisions based on different conditions. We can specify to the computer the *order* in which it should execute certain instructions, or that it should only execute *certain* instructions in specific cases. That means that depending on the conditions, the instructions that our program executes can change.

The order that computer programs execute a set of instructions is known as *control flow*. We can use different *control structures* to alter the flow of our program. Control structures let us handle different situations that might arise and make our programs more flexible. In C#, these type of statements are known as conditional or <u>selection</u> statements.

Boolean logic and conditional statements go hand in hand. A computer will determine if a condition is true or false and execute a set of instructions accordingly. Make sure that you're comfortable with Boolean values, comparison operators, and logical operators!

We'll look at a couple of different structures that use Boolean logic to control the flow of our programs, including:

If statements

If...Else... statements

Else if statements

Switch statements

**Ternary Operators** 

## ✓ Instructions

Conditional control structures, or just conditionals, allow programs to do different things in different scenarios. As you can see, they follow a logic similar to how humans think, making it easy to write clear code while still handling complex processes.

Select "Make Profile Public", then click through each step of the conditional structure. Select "Make Profile Private", then click through each step of the conditional structure. What's the control flow for each?