

Ternary Operators

The *ternary operator* allows for a compact syntax in the case of binary decisions. Like an `if...else` statement, it evaluates a single condition and executes one expression if the condition is true and the second expression otherwise.

Here's an example of a ternary operator in action:

```
string color = "blue";  
string result = (color == "blue") ? "blue" : "NOT blue";  
  
Console.WriteLine(result);
```

In this example, we create a variable `result` and save the outcome of the ternary operator expression. The expression starts with the Boolean expressions `(color == "blue")`, followed by the ternary operator `?`, then the two possible outcomes, separated by a colon `:`. The first outcome, `"blue"` will be saved to `result` if the Boolean expression evaluates to `true`, otherwise it will store the second outcome.

Ternary operators can also be chained, like else if statements. But careful! Since the entire expression exists on one line, it can quickly become unreadable.

When using ternary operators, make sure to pay attention to:

Parentheses: we place the boolean expression that the statement is evaluating in parentheses `()`.

The `?` operator: make sure this comes after the statement and before the outcomes.

Colon: This separates the two possible outcomes.

☒ Instructions

1.

You're growing peppers and wrote a program that lets you know if it's time to pick them. If a pepper is at least 3.5 inches, it's time to be picked. If it's not ready, the program should tell you to "wait a little longer".

Start by creating a string variable named `message`. Save the comparison statement that checks to see if the `pepperLength` is 3.5 inches or more.

Note: This will throw an error, since we have not completed our statement.

Hint



To create a variable with a string value, define the data type as `string`:

```
string language;
```

When saving a comparison statement, be sure to wrap it in parentheses `()`:

```
(phones < 6)
```

2.

Next, write out your ternary operation. If a pepper is ready to be picked (3.5 inches or longer) your program should set `message` to "ready!" If it's not ready it should set `message` to "wait a little longer".

Hint



To use a ternary operator, first write your condition, followed by the ternary operator `?`. Follow with an output if the condition is `true`, followed by a colon `:`, and then the output if the condition is `false`.

```
string color = "blue";  
string result = (color == "blue") ? "blue" : "NOT blue";  
  
Console.WriteLine(result);
```

3.

Print the value of `message` to the console.