Get Info About Strings

In addition to containing the value of a piece of text, strings also contain information about themselves. It can be useful to know these properties when working with strings. There are several built-in .NET methods that we can use to get more information about strings.

Length

Since strings are composed of a set of characters, we can find out how many characters exist in a string with the `.Length` method. A common example is if we're building a form and need to make sure a user submission doesn't exceed a certain character length.

```
string userTweet = Console.ReadLine();

userTweet.Length; // returns the length of the password
```

We append the `.Length` property to a string that we have, such as a user's tweet.

IndexOf

We can also find the position of a specific character or substring using `.IndexOf()`. This method is useful for searching to see if something exists in a string.

If it does exist within a string, the method will return the *position* of the search term in the larger string. Each character in a string has a unique position, like an address. Positions starts at 0 and increment by 1.

```
string word = "radio";

word.IndexOf("a"); // returns 1
```

Since positioning starts at 0, the second thing in the string will return a 1. If it doesn't exist in the string the method will return a -1. If we pass it an empty string, it will return 0. If it occurs more than once, it will return the first instance.

☑Instructions

1.

You've been asked to build a program that verifies some information about a piece of data.

First, check the length of `password` and save the result to the variable `passwordLength`.

Hint

To use the `.Length` property, append it to a string that you have:

```
string dog = "corgi";
dog.Length; // returns 5
```

2.

Next, let's see if this password contains any special characters, like an exclamation point (!). Save the result to the variable `passwordCheck`. Run the program to see the results printed to the console.

Hint

To use the `IndexOf()` method, append it to a string that you have:

```
string dog = "corgi";
dog.IndexOf("?"); // returns -1
```