01 Hello World

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1.1 What is C#?

It's a powerful and widely used programming language that you can use to make websites, games, mobile apps, desktop apps, and more. C# is part of the .NET programming platform, which includes libraries for all those applications. Learn C#, get started, and it'll give you the world.

1.2 C#: Hello World

```
[1]: Console.WriteLine("Hello World!");
```

```
Hello World!
```

`Console.WriteLine` is a method that is used to print a message to a text console. In this case, you specified "Hello World" as the output.

2 Declare and use variables

A **variable** is a symbol you can use to run the same code with different values. For example, you can declare a new variable named `aFriend` that you can use with `Console.WriteLine` to output a string. You can declare this variable by using the type `string` or by using the `var` keyword that will automatically figure out the type for you.

Go ahead and run the following code to see the output of **Jayme**.

Next, change the name in the variable and run it again to see something different.

```
[2]: var aFriend = "Jayme";
     Console.WriteLine(aFriend);
```

```
Jayme
```

3 Combining Strings

You may have noticed that the word "Hello" was missing from the last code block. You can fix it by combining multiple string together using `+` to create a new string that it output to the console.

```
[3]: Console.WriteLine("Hello " + aFriend + "!");
```

```
Hello Jayme!
```

4   String Interpolation

You just used **+** to build a new string from a **variable** and a **constant**. There's a better way to do this by placing the variable between {and } to tell C# to replace that text with the value of the variable. This is called **string interpolation**. You can then add a **$** before the opening quote to enable string interpolation for the string.

```
[4]: aFriend = "string interpolation";
     Console.WriteLine($"Hello {aFriend}!");
```

```
Hello string interpolation!
```

[ ]: