

The format Function

Let's look at an example, where string strings can be very useful. The standard library has a `to_string()` function (starting in C++11) which works for all types of numbers. Unfortunately, for floating-point numbers, you have **no control over the output format**, which isn't very useful. Let's fix that.

Here's a short function with two arguments: a `double` for the value, and the number of decimal digits to display. The function returns the value as a formatted string. (Note the default argument, which makes the function easier to use.)

```
1 | string format(double value, int digits=2)
2 | {
3 |     ostringstream out;
4 |     out << fixed << setprecision(digits) << value;
5 |     return out.str();
6 | }
```

You can use the `format()` function like this:

```
cout << format(2.456) << endl;      // 2.46
cout << format(1.0 / 3.0, 5) << endl; // .33333
```



This course content is offered under a [CC Attribution Non-Commercial](#) license. Content in this course can be considered under this license unless otherwise noted.