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Python String Format Cookbook

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Every time I use Python's string formatter, version 2.7 and up, I get it wrong and for that I can't figure out their documentation format. I got very used to the older % method. So I created my own string format cookbook. Let me know in the comments of any other cookbooks you include.

Number Formatting

The following table shows various ways to format numbers using python's *newish* string formatting examples for both float formatting and integers.

To run examples use `print("FORMAT".format(NUMBER));`

So to get the output of the first example, you would run: `print("{:.2f}".format(3.1415926))`

Number	Format	Output	Description
3.1415926	{:.2f}	3.14	2 decimal places
3.1415926	{:+.2f}	+3.14	2 decimal places with sign
-1	{:+.2f}	-1.00	2 decimal places with sign
2.71828	{:.0f}	3	No decimal places
5	{:0>2d}	05	Pad number with zeros (left padding, width 2)
5	{:x<4d}	5xxx	Pad number with x's (right padding, width 4)
10	{:x<4d}	10xx	Pad number with x's (right padding, width 4)
1000000	{:,}	1,000,000	Number format with comma separator
0.25	{:.2%}	25.00%	Format percentage
1000000000	{:.2e}	1.00e+09	Exponent notation
13	{:10d}	13	Right aligned (default, width 10)
13	{:<10d}	13	Left aligned (width 10)
13	{:^10d}	13	Center aligned (width 10)

string.format() basics

Here are a couple of examples of basic string substitution, the {} is the placeholder for variables. If no format is specified, it will insert and format as a string.

```
s1 = "so much depends upon {}".format("a red wheel barrow")
s2 = "glazed with {} water beside the {} chickens".format("rain", "white")
```

You can also use the numeric position of the variables and change them in the string to get some flexibility when doing the formatting, if you made a mistake in the order you can correct it without shuffling all variables around.

```
s1 = "{0} is better than {1}".format("emacs", "vim")
```

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