

BASICS OF PYTHON

Just printing hello world is not enough, is it? You want to do more than that - you want to take some input, manipulate it and get something out of it. We can achieve this in Python using constants and variables, and we'll learn some other concepts as well in this chapter.

Comments

Comments are any text to the right of the # symbol and are mainly useful as notes for the reader of the program.

For example:

```
print 'hello world' # Note that print is a statement
```

or:

```
# Note that print is a statement
```

```
print 'hello world'
```

Use as many useful comments as you can in your program to:

- explain assumptions
- explain important decisions
- explain important details
- explain problems you're trying to solve
- explain problems you're trying to overcome in your program, etc.

Code tells you how, comments should tell you why.

This is useful for readers of your program so that they can easily understand what the program is doing. Remember, that person can be yourself after six months!

Literal Constants

An example of a literal constant is a number like 5, 1.23, or a string like "This is a string" or "It's a string!".

It is called a literal because it is *literal* - you use its value literally. The number 2 always represents itself and nothing else - it is a *constant* because its value cannot be changed. Hence, all these are referred to as literal constants.

Numbers

Numbers are mainly of two types - integers and floats.

An examples of an integer is 2 which is just a whole number.

Examples of floating point numbers (or *floats* for short) are 3.23 and 52.3E-4. The E notation indicates powers of 10. In this case, 52.3E-4 means $52.3 * 10^{-4}$.

Note for Experienced Programmers

NOTE There is no separate long type. The int type can be an integer of any size.

Source: <http://www.swaroopch.com/notes/python/>