1.6: CONVERSING WITH PYTHON

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Now that we have a word and a simple sentence that we know in Python, we need to know how to start a conversation with Python to test our new language skills.

Before you can converse with Python, you must first install the Python software on your computer and learn how to start Python on your computer. That is too much detail for this chapter so I suggest that you consult www.py4e.com where I have detailed instructions and screencasts of setting up and starting Python on Macintosh and Windows systems. At some point, you will be in a terminal or command window and you will type *python* and the Python interpreter will start executing in interactive mode and appear somewhat as follows:

```
Python 3.5.1 (v3.5.1:37a07cee5969, Dec  6 2015, 01:54:25)
[MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

The `>>>` prompt is the Python interpreter's way of asking you, "What do you want me to do next?" Python is ready to have a conversation with you. All you have to know is how to speak the Python language.

Let's say for example that you did not know even the simplest Python language words or sentences. You might want to use the standard line that astronauts use when they land on a faraway planet and try to speak with the inhabitants of the planet:

```
>>> I come in peace, please take me to your leader
  File "<stdin>", line 1
    I come in peace, please take me to your leader
         ^
SyntaxError: invalid syntax
>>>
```

This is not going so well. Unless you think of something quickly, the inhabitants of the planet are likely to stab you with their spears, put you on a spit, roast you over a fire, and eat you for dinner.

Luckily you brought a copy of this book on your travels, and you thumb to this very page and try again:

```
>>> print('Hello world!')
Hello world!
```

This is looking much better, so you try to communicate some more:

```
>>> print('You must be the legendary god that comes from the sky')
You must be the legendary god that comes from the sky
>>> print('We have been waiting for you for a long time')
We have been waiting for you for a long time
>>> print('Our legend says you will be very tasty with mustard')
Our legend says you will be very tasty with mustard
>>> print 'We will have a feast tonight unless you say
  File "<stdin>", line 1
    print 'We will have a feast tonight unless you say
                                                      ^
SyntaxError: Missing parentheses in call to 'print'
>>>
```

CODE 1.6.1 (PYTHON):

```
print 'We will have a feast tonight unless you say
```

run restart

The conversation was going so well for a while and then you made the tiniest mistake using the Python language and Python brought the spears back out.

At this point, you should also realize that while Python is amazingly complex and powerful and very picky about the syntax you use to communicate with it, Python is *not* intelligent. You are really just having a conversation with yourself, but using proper syntax.

In a sense, when you use a program written by someone else the conversation is between you and those other programmers with Python acting as an intermediary. Python is a way for the creators of programs to express how the conversation is supposed to proceed. And in just a few more chapters, you will be one of those programmers using Python to talk to the users of your program.

Before we leave our first conversation with the Python interpreter, you should probably know the proper way to say "good-bye" when interacting with the inhabitants of Planet Python:

```
>>> good-bye
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'good' is not defined
>>> if you don't mind, I need to leave
  File "<stdin>", line 1
    if you don't mind, I need to leave
             ^
SyntaxError: invalid syntax
>>> quit()
```

You will notice that the error is different for the first two incorrect attempts. The second error is different because *if* is a reserved word and Python saw the reserved word and thought we were trying to say something but got the syntax of the sentence wrong.

The proper way to say "good-bye" to Python is to enter *quit()* at the interactive chevron `>>>` prompt. It would have probably taken you quite a while to guess that one, so having a book handy probably will turn out to be helpful.