#### Boa Constructor

a cross platform Python IDE and wxPython GUI Builder

#### character

# treated as a string of length one

## class

a user-defined prototype that accesses attributes which characterize any object in a block

### close function

## used to close the entire function

## Common Gateway Interface (CGI)

a gateway with standards that tell us how information is exchanged between the web server and a custom script

## compiled languages

the entire source code file is read and then converted into an executable code, or a machine level language

#### Coroutine

a function written to operate as a task that processes a sequence of inputs sent to it; created by using the yield statement as an expression

## Datatypes

tell what kind of values can be stored in a variable and which operations can be performed on each of them

## dictionary

an associative array or hash table that contains objects indexed by keys; created by enclosing the values in curly braces

## Eclipse PyDev

an advanced open source IDE GUI; a multi-level language supporting platform

## extension

any code that you write using a compiled language, like C, C++, or Java, and integrate or import into another Python script

## **FLOSS**

free/libre/open-source software; based on the concept of a community which shares knowledge

### function

a block of organized, reusable code which performs a single related action

## Function overloading

the assignment of more than one behavior to a particular function

## generator

# any function that uses yield

## identifier

used to identify a module, function, variable, class, or any other objects

### **IDLE**

has been wrapped together with the default implementation of Python language; an optional part of Python

#### Inheritance

a property used to transfer or modify the characteristics of the original class to a new class

## integrated development environment (IDE)

made up of a source code editor, build automation tools, and a debugger

### interpreted language

the source code text file is read line-by-line and each statement is converted into machine language and then executed before the next line is read

## Komodo IDE and Edit

## a full featured developed environment GUI

### Lists

# sequences of arbitrary objects

#### match function

matches RE (regular expression) pattern to a string with optional flags

### module

a file consisting of Python code, definitions, and statements; can define functions, classes, and variables; may contain runnable code

#### NetBeans IDE

a community driven effort; a powerful open source development environment GUI

### Number datatypes

## store numeric values; immutable datatypes

## object

consists of internal data and methods that perform various kinds of operations involving that data

# object-oriented approach

program is built around objects which combine data and functionality

### open function

# returns a new file object

### operator overloading

the assignment of more than one function to a particular operator

### package

a hierarchical file directory structure that defines a single Python application environment

### Polymorphism

a method signifying that the meaning of an operation depends on the type of the objects or attributes being operated on

### print function

converts the expressions and produces a standard output format in a string

# procedure-oriented programming

## programs are built around procedures or functions

## Python

developed by Guido van Rossum; a high-level programming, interactive language

#### readline method

reads a single line of input, including the termination of newline

### regular expression

a special sequence of characters that helps you match or find other strings or sets of strings, using a specialized syntax

#### Reserved words

should not be used as constants, variables, or identifiers; should be in lowercase letters only

#### search function

searches for the initial occurrence of the RE pattern within a string with optional flags

# Stani's Python Editor (SPE)

a cross-platform IDE for Python developed and managed by Stani Michiels; free software that runs on GNU/Linux, Mac OS X, and Microsoft Windows

### Strings

a set of characters in between quotation marks; can be enclosed in single, double, and triple quotes

#### traceback message

indicates the type of error that occurred, along with its location

### Tuples

created by enclosing a group of values in parentheses; the data cannot be modified

# user-defined functions

# user created functions

### WingIDE

### a commercially created programming language for Python

#### write function

# used to write raw data