Python Module Index

_ | **a** | **b** | **c** | **d** | **e** | **f** | **g** | **h** | **i** | **j** | **k** | **l** | **m** | **n** | **o** | **p** | **q** | **r** | **s** | **t** | **u** | **v** | **w** | **x** | **z**

_	
__future__	*Future statement definitions*
__main__	*The environment where the top-level script is run.*
_dummy_thread	*Drop-in replacement for the _thread module.*
_thread	*Low-level threading API.*

a	
abc	*Abstract base classes according to :pep:`3119`.*
aifc	*Read and write audio files in AIFF or AIFC format.*
argparse	*Command-line option and argument parsing library.*
array	*Space efficient arrays of uniformly typed numeric values.*
ast	*Abstract Syntax Tree classes and manipulation.*
asynchat	*Support for asynchronous command/response protocols.*
asyncio	*Asynchronous I/O.*
asyncore	*A base class for developing asynchronous socket handling services.*
atexit	*Register and execute cleanup functions.*
audioop	*Manipulate raw audio data.*

b	
base64	*RFC 3548: Base16, Base32, Base64 Data Encodings; Base85 and Ascii85*
bdb	*Debugger framework.*
binascii	*Tools for converting between binary and various ASCII-encoded binary representations.*
binhex	*Encode and decode files in binhex4 format.*
bisect	*Array bisection algorithms for binary searching.*
builtins	*The module that provides the built-in namespace.*
bz2	*Interfaces for bzip2 compression and decompression.*

c	
calendar	*Functions for working with calendars, including some emulation of the Unix cal program.*
cgi	*Helpers for running Python scripts via the Common Gateway Interface.*
cgitb	*Configurable traceback handler for CGI scripts.*

chunk	*Module to read IFF chunks.*
cmath	*Mathematical functions for complex numbers.*
cmd	*Build line-oriented command interpreters.*
code	*Facilities to implement read-eval-print loops.*
codecs	*Encode and decode data and streams.*
codeop	*Compile (possibly incomplete) Python code.*
collections	*Container datatypes*
colorsys	*Conversion functions between RGB and other color systems.*
compileall	*Tools for byte-compiling all Python source files in a directory tree.*
concurrent	
configparser	*Configuration file parser.*
contextlib	*Utilities for with-statement contexts.*
contextvars	*Context Variables*
copy	*Shallow and deep copy operations.*
copyreg	*Register pickle support functions.*
cProfile	
crypt *(Unix)*	*The crypt() function used to check Unix passwords.*
csv	*Write and read tabular data to and from delimited files.*
ctypes	*A foreign function library for Python.*
curses *(Unix)*	*An interface to the curses library, providing portable terminal handling.*

d	
dataclasses	*Generate special methods on user-defined classes.*
datetime	*Basic date and time types.*
dbm	*Interfaces to various Unix "database" formats.*
decimal	*Implementation of the General Decimal Arithmetic Specification.*
difflib	*Helpers for computing differences between objects.*
dis	*Disassembler for Python bytecode.*
distutils	*Support for building and installing Python modules into an existing Python installation.*
doctest	*Test pieces of code within docstrings.*
dummy_threading	*Drop-in replacement for the threading module.*

e	
email	*Package supporting the parsing, manipulating, and generating email messages.*
encodings	
ensurepip	*Bootstrapping the "pip" installer into an existing Python installation or virtual environment.*
enum	*Implementation of an enumeration class.*

| errno | *Standard errno system symbols.* |

f

faulthandler	*Dump the Python traceback.*
fcntl *(Unix)*	*The fcntl() and ioctl() system calls.*
filecmp	*Compare files efficiently.*
fileinput	*Loop over standard input or a list of files.*
fnmatch	*Unix shell style filename pattern matching.*
formatter	**Deprecated:** *Generic output formatter and device interface.*
fractions	*Rational numbers.*
ftplib	*FTP protocol client (requires sockets).*
functools	*Higher-order functions and operations on callable objects.*

g

gc	*Interface to the cycle-detecting garbage collector.*
getopt	*Portable parser for command line options; support both short and long option names.*
getpass	*Portable reading of passwords and retrieval of the userid.*
gettext	*Multilingual internationalization services.*
glob	*Unix shell style pathname pattern expansion.*
grp *(Unix)*	*The group database (getgrnam() and friends).*
gzip	*Interfaces for gzip compression and decompression using file objects.*

h

hashlib	*Secure hash and message digest algorithms.*
heapq	*Heap queue algorithm (a.k.a. priority queue).*
hmac	*Keyed-Hashing for Message Authentication (HMAC) implementation*
html	*Helpers for manipulating HTML.*
http	*HTTP status codes and messages*

i

imaplib	*IMAP4 protocol client (requires sockets).*
imghdr	*Determine the type of image contained in a file or byte stream.*
imp	**Deprecated:** *Access the implementation of the import statement.*
importlib	*The implementation of the import machinery.*
inspect	*Extract information and source code from live objects.*
io	*Core tools for working with streams.*
ipaddress	*IPv4/IPv6 manipulation library.*
itertools	*Functions creating iterators for efficient looping.*

j

json	Encode and decode the JSON format.

k

keyword	Test whether a string is a keyword in Python.

l

lib2to3	The 2to3 library
linecache	Provides random access to individual lines from text files.
locale	Internationalization services.
logging	Flexible event logging system for applications.
lzma	A Python wrapper for the liblzma compression library.

m

mailbox	Manipulate mailboxes in various formats
mailcap	Mailcap file handling.
marshal	Convert Python objects to streams of bytes and back (with different constraints).
math	Mathematical functions (sin() etc.).
mimetypes	Mapping of filename extensions to MIME types.
mmap	Interface to memory-mapped files for Unix and Windows.
modulefinder	Find modules used by a script.
msilib *(Windows)*	Creation of Microsoft Installer files, and CAB files.
msvcrt *(Windows)*	Miscellaneous useful routines from the MS VC++ runtime.
multiprocessing	Process-based parallelism.

n

netrc	Loading of .netrc files.
nis *(Unix)*	Interface to Sun's NIS (Yellow Pages) library.
nntplib	NNTP protocol client (requires sockets).
numbers	Numeric abstract base classes (Complex, Real, Integral, etc.).

o

operator	Functions corresponding to the standard operators.
optparse	**Deprecated:** *Command-line option parsing library.*
os	Miscellaneous operating system interfaces.
ossaudiodev *(Linux, FreeBSD)*	Access to OSS-compatible audio devices.

p

parser	*Access parse trees for Python source code.*
pathlib	*Object-oriented filesystem paths*
pdb	*The Python debugger for interactive interpreters.*
pickle	*Convert Python objects to streams of bytes and back.*
pickletools	*Contains extensive comments about the pickle protocols and pickle-machine opcodes, as well as some useful functions.*
pipes *(Unix)*	*A Python interface to Unix shell pipelines.*
pkgutil	*Utilities for the import system.*
platform	*Retrieves as much platform identifying data as possible.*
plistlib	*Generate and parse Mac OS X plist files.*
poplib	*POP3 protocol client (requires sockets).*
posix *(Unix)*	*The most common POSIX system calls (normally used via module os).*
pprint	*Data pretty printer.*
profile	*Python source profiler.*
pstats	*Statistics object for use with the profiler.*
pty *(Linux)*	*Pseudo-Terminal Handling for Linux.*
pwd *(Unix)*	*The password database (getpwnam() and friends).*
py_compile	*Generate byte-code files from Python source files.*
pyclbr	*Supports information extraction for a Python module browser.*
pydoc	*Documentation generator and online help system.*

q	
queue	*A synchronized queue class.*
quopri	*Encode and decode files using the MIME quoted-printable encoding.*

r	
random	*Generate pseudo-random numbers with various common distributions.*
re	*Regular expression operations.*
readline *(Unix)*	*GNU readline support for Python.*
reprlib	*Alternate repr() implementation with size limits.*
resource *(Unix)*	*An interface to provide resource usage information on the current process.*
rlcompleter	*Python identifier completion, suitable for the GNU readline library.*
runpy	*Locate and run Python modules without importing them first.*

s	
sched	*General purpose event scheduler.*
secrets	*Generate secure random numbers for managing secrets.*
select	*Wait for I/O completion on multiple streams.*
selectors	*High-level I/O multiplexing.*

shelve	*Python object persistence.*
shlex	*Simple lexical analysis for Unix shell-like languages.*
shutil	*High-level file operations, including copying.*
signal	*Set handlers for asynchronous events.*
site	*Module responsible for site-specific configuration.*
smtpd	*A SMTP server implementation in Python.*
smtplib	*SMTP protocol client (requires sockets).*
sndhdr	*Determine type of a sound file.*
socket	*Low-level networking interface.*
socketserver	*A framework for network servers.*
spwd *(Unix)*	*The shadow password database (getspnam() and friends).*
sqlite3	*A DB-API 2.0 implementation using SQLite 3.x.*
ssl	*TLS/SSL wrapper for socket objects*
stat	*Utilities for interpreting the results of os.stat(), os.lstat() and os.fstat().*
statistics	*Mathematical statistics functions*
string	*Common string operations.*
stringprep	*String preparation, as per RFC 3453*
struct	*Interpret bytes as packed binary data.*
subprocess	*Subprocess management.*
sunau	*Provide an interface to the Sun AU sound format.*
symbol	*Constants representing internal nodes of the parse tree.*
symtable	*Interface to the compiler's internal symbol tables.*
sys	*Access system-specific parameters and functions.*
sysconfig	*Python's configuration information*
syslog *(Unix)*	*An interface to the Unix syslog library routines.*

t	
tabnanny	*Tool for detecting white space related problems in Python source files in a directory tree.*
tarfile	*Read and write tar-format archive files.*
telnetlib	*Telnet client class.*
tempfile	*Generate temporary files and directories.*
termios *(Unix)*	*POSIX style tty control.*
test	*Regression tests package containing the testing suite for Python.*
textwrap	*Text wrapping and filling*
threading	*Thread-based parallelism.*
time	*Time access and conversions.*
timeit	*Measure the execution time of small code snippets.*
tkinter	*Interface to Tcl/Tk for graphical user interfaces*

token	Constants representing terminal nodes of the parse tree.
tokenize	Lexical scanner for Python source code.
trace	Trace or track Python statement execution.
traceback	Print or retrieve a stack traceback.
tracemalloc	Trace memory allocations.
tty (Unix)	Utility functions that perform common terminal control operations.
turtle	An educational framework for simple graphics applications
turtledemo	A viewer for example turtle scripts
types	Names for built-in types.
typing	Support for type hints (see :pep:`484`).

u	
unicodedata	Access the Unicode Database.
unittest	Unit testing framework for Python.
urllib	
uu	Encode and decode files in uuencode format.
uuid	UUID objects (universally unique identifiers) according to RFC 4122

v	
venv	Creation of virtual environments.

w	
warnings	Issue warning messages and control their disposition.
wave	Provide an interface to the WAV sound format.
weakref	Support for weak references and weak dictionaries.
webbrowser	Easy-to-use controller for Web browsers.
winreg (Windows)	Routines and objects for manipulating the Windows registry.
winsound (Windows)	Access to the sound-playing machinery for Windows.
wsgiref	WSGI Utilities and Reference Implementation.

x	
xdrlib	Encoders and decoders for the External Data Representation (XDR).
xml	Package containing XML processing modules
xmlrpc	

z	
zipapp	Manage executable Python zip archives
zipfile	Read and write ZIP-format archive files.
zipimport	Support for importing Python modules from ZIP archives.

zlib   *Low-level interface to compression and decompression routines*
                         compatible with gzip.