

List of Inbuilt Modules

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.

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.

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.

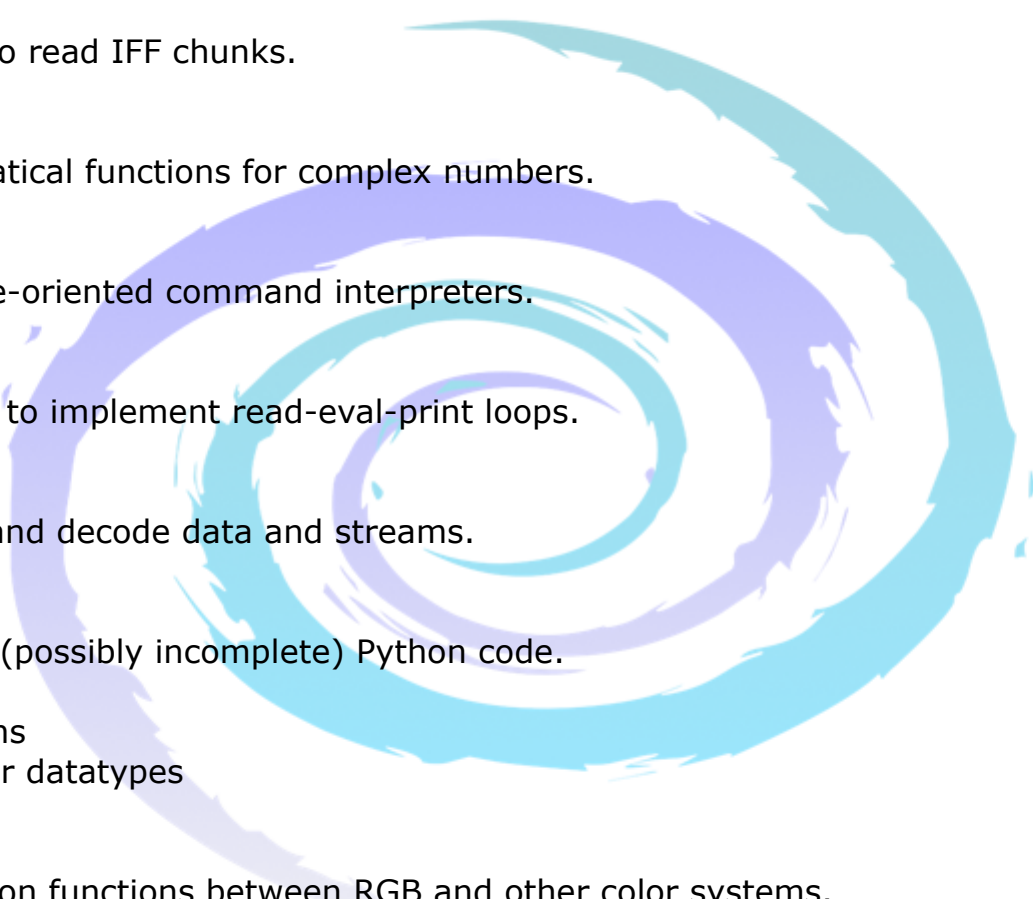
compileall
Tools for byte-compiling all Python source files in a directory tree.

configparser
Configuration file parser.

contextlib
Utilities for with-statement contexts.

contextvars
Context Variables

copy
Shallow and deep copy operations.



copyreg

Register pickle support functions.

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.

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.

email

Package supporting the parsing, manipulating, and generating email messages.

ensurepip

Bootstrapping the "pip" installer into an existing Python installation or virtual environment.

enum

Implementation of an enumeration class.

errno

Standard errno system symbols.

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.

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.

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

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.

json

Encode and decode the JSON format.

keyword

Test whether a string is a keyword in Python.

lib2to3

the 2to3 library

linecache

This module 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.

macpath

Mac OS 9 path manipulation functions.

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.

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.).

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.

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 class browser.

pydoc

Documentation generator and online help system.

queue

A synchronized queue class.

quopri

Encode and decode files using the MIME quoted-printable encoding.

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.

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.

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

unicodedata

Access the Unicode Database.

unittest

Unit testing framework for Python.

uu

Encode and decode files in uuencode format.

uuid

UUID objects (universally unique identifiers) according to RFC 4122

venv

Creation of virtual environments.

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.

xdrlib

Encoders and decoders for the External Data Representation (XDR).

xml

Package containing XML processing modules

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.