

Common Python Libraries: Modules and Functions Reference

This document contains a comprehensive list of commonly used Python libraries with their functions.

Library: math

- acos
- acosh
- asin
- asinh
- atan
- atan2
- atanh
- cbrt
- ceil
- comb
- copysign
- cos
- cosh
- degrees
- dist
- e
- erf
- erfc
- exp
- exp2
- expm1
- fabs
- factorial
- floor
- fmod
- frexp
- fsum

- gamma
- gcd
- hypot
- inf
- isclose
- isfinite
- isinf
- isnan
- isqrt
- lcm
- ldexp
- lgamma
- log
- log10
- log1p
- log2
- modf
- nan
- nextafter
- perm
- pi
- pow
- prod
- radians
- remainder
- sin
- sinh
- sqrt
- tan
- tanh
- tau
- trunc
- ulp

Library: datetime

- MAXYEAR
- MINYEAR
- UTC
- date
- datetime
- datetime_CAPI
- sys
- time
- timedelta
- timezone
- tzinfo

Library: random

- BPF
- LOG4
- NV_MAGICCONST
- RECIP_BPF
- Random
- SG_MAGICCONST
- SystemRandom
- TWOPI
- betavariate
- choice
- choices
- expovariate
- gammavariate
- gauss
- getrandbits
- getstate
- lognormvariate
- normalvariate

- paretovariate
- randbytes
- randint
- random
- randrange
- sample
- seed
- setstate
- shuffle
- triangular
- uniform
- vonmisesvariate
- weibullvariate

Library: os

- CLD_CONTINUED
- CLD_DUMPED
- CLD_EXITED
- CLD_KILLED
- CLD_STOPPED
- CLD_TRAPPED
- DirEntry
- EFD_CLOEXEC
- EFD_NONBLOCK
- EFD_SEMAPHORE
- EX_CANTCREAT
- EX_CONFIG
- EX_DATAERR
- EX_IOERR
- EX_NOHOST
- EX_NOINPUT
- EX_NOPERM
- EX_NOUSER

- EX_OK
- EX_OSERR
- EX_OSFILE
- EX_PROTOCOL
- EX_SOFTWARE
- EX_TEMPFAIL
- EX_UNAVAILABLE
- EX_USAGE
- F_LOCK
- F_OK
- F_TEST
- F_TLOCK
- F_ULOCK
- GRND_NONBLOCK
- GRND_RANDOM
- GenericAlias
- MFD_ALLOW_SEALING
- MFD_CLOEXEC
- MFD_HUGETLB
- MFD_HUGE_16GB
- MFD_HUGE_16MB
- MFD_HUGE_1GB
- MFD_HUGE_1MB
- MFD_HUGE_256MB
- MFD_HUGE_2GB
- MFD_HUGE_2MB
- MFD_HUGE_32MB
- MFD_HUGE_512KB
- MFD_HUGE_512MB
- MFD_HUGE_64KB
- MFD_HUGE_8MB
- MFD_HUGE_MASK
- MFD_HUGE_SHIFT

- Mapping
- MutableMapping
- NGROUPS_MAX
- O_ACCMODE
- O_APPEND
- O_ASYNC
- O_CLOEXEC
- O_CREAT
- O_DIRECT
- O_DIRECTORY
- O_DSYNC
- O_EXCL
- O_FSYNC
- O_LARGEFILE
- O_NDELAY
- O_NOATIME
- O_NOCTTY
- O_NOFOLLOW
- O_NONBLOCK
- O_PATH
- O_RDONLY
- O_RDWR
- O_RSYNC
- O_SYNC
- O_TMPFILE
- O_TRUNC
- O_WRONLY
- POSIX_FADV_DONTNEED
- POSIX_FADV_NOREUSE
- POSIX_FADV_NORMAL
- POSIX_FADV_RANDOM
- POSIX_FADV_SEQUENTIAL
- POSIX_FADV_WILLNEED

- POSIX_SPAWN_CLOSE
- POSIX_SPAWN_DUP2
- POSIX_SPAWN_OPEN
- PRIO_PGRP
- PRIO_PROCESS
- PRIO_USER
- P_ALL
- P_NOWAIT
- P_NOWAITO
- P_PGID
- P_PID
- P_PIDFD
- P_WAIT
- PathLike
- RTLD_DEEPBIND
- RTLD_GLOBAL
- RTLD_LAZY
- RTLD_LOCAL
- RTLD_NODELETE
- RTLD_NOLOAD
- RTLD_NOW
- RWF_APPEND
- RWF_DSYNC
- RWF_HIPRI
- RWF_NOWAIT
- RWF_SYNC
- R_OK
- SCHED_BATCH
- SCHED_FIFO
- SCHED_IDLE
- SCHED_OTHER
- SCHED_RESET_ON_FORK
- SCHED_RR

- SEEK_CUR
- SEEK_DATA
- SEEK_END
- SEEK_HOLE
- SEEK_SET
- SPLICE_F_MORE
- SPLICE_F_MOVE
- SPLICE_F_NONBLOCK
- ST_APPEND
- ST_MANDLOCK
- ST_NOATIME
- ST_NODEV
- ST_NODIRATIME
- ST_NOEXEC
- ST_NOSUID
- ST_RDONLY
- ST_RELATIME
- ST_SYNCHRONOUS
- ST_WRITE
- TMP_MAX
- WCONTINUED
- WCOREDUMP
- WEXITED
- WEXITSTATUS
- WIFCONTINUED
- WIFEXITED
- WIFSIGNALED
- WIFSTOPPED
- WNOHANG
- WNOWAIT
- WSTOPPED
- WSTOPSIG
- WTERMSIG

- WUNTRACED
- W_OK
- XATTR_CREATE
- XATTR_REPLACE
- XATTR_SIZE_MAX
- X_OK
- abc
- abort
- access
- altsep
- chdir
- chmod
- chown
- chroot
- close
- closerange
- confstr
- confstr_names
- copy_file_range
- cpu_count
- ctermid
- curdir
- defpath
- device_encoding
- devnull
- dup
- dup2
- environ
- environb
- error
- eventfd
- eventfd_read
- eventfd_write

- execl
- execlle
- execlp
- execlpe
- execv
- execve
- execvp
- execvpe
- extsep
- fchdir
- fchmod
- fchown
- fdatsync
- fdopen
- fork
- forkpty
- fpathconf
- fsdecode
- fsencode
- fspath
- fstat
- fstatvfs
- fsync
- ftruncate
- fwalk
- get_blocking
- get_exec_path
- get_inheritable
- get_terminal_size
- getcwd
- getcwdb
- getegid
- getenv

- getenvb
- geteuid
- getgid
- getgrouplist
- getgroups
- getloadavg
- getlogin
- getpgid
- getpgrp
- getpid
- getppid
- getpriority
- getrandom
- getresgid
- getresuid
- getsid
- getuid
- getxattr
- initgroups
- isatty
- kill
- killpg
- lchown
- linesep
- link
- listdir
- listxattr
- lockf
- login_tty
- lseek
- lstat
- major
- makedev

- mkdirs
- memfd_create
- minor
- mkdir
- mkfifo
- mknod
- name
- nice
- open
- openpty
- paddir
- path
- pathconf
- pathconf_names
- pathsep
- pidfd_open
- pipe
- pipe2
- popen
- posix_fadvise
- posix_fallocate
- posix_spawn
- posix_spawnnp
- pread
- preadv
- putenv
- pwrite
- pwritev
- read
- readlink
- readv
- register_at_fork
- remove

- removedirs
- removexattr
- rename
- renames
- replace
- rmdir
- scandir
- sched_get_priority_max
- sched_get_priority_min
- sched_getaffinity
- sched_getparam
- sched_getscheduler
- sched_param
- sched_rr_get_interval
- sched_setaffinity
- sched_setparam
- sched_setscheduler
- sched_yield
- sendfile
- sep
- set_blocking
- set_inheritable
- setegid
- seteuid
- setgid
- setgroups
- setpgid
- setpgrp
- setpriority
- setregid
- setresgid
- setresuid
- setreuid

- setsid
- setuid
- setxattr
- spawnl
- spawnle
- spawnlp
- spawnlpe
- spawnv
- spawnve
- spawnvp
- spawnvpe
- splice
- st
- stat
- stat_result
- statvfs
- statvfs_result
- strerror
- supports_bytes_environ
- supports_dir_fd
- supports_effective_ids
- supports_fd
- supports_follow_symlinks
- symlink
- sync
- sys
- sysconf
- sysconf_names
- system
- tcgetpgrp
- tcsetpgrp
- terminal_size
- times

- times_result
- truncate
- ttyname
- umask
- uname
- uname_result
- unlink
- unsetenv
- urandom
- utime
- wait
- wait3
- wait4
- waitid
- waitid_result
- waitpid
- waitstatus_to_exitcode
- walk
- write
- writev

Library: sys

- abiflags
- addaudithook
- api_version
- argv
- audit
- base_exec_prefix
- base_prefix
- breakpointhook
- builtin_module_names
- byteorder
- call_tracing

- copyright
- displayhook
- dont_write_bytecode
- exc_info
- excepthook
- exception
- exec_prefix
- executable
- exit
- flags
- float_info
- float_repr_style
- get_asyncgen_hooks
- get_coroutine_origin_tracking_depth
- get_int_max_str_digits
- getallocatedblocks
- getdefaultencoding
- getdlopenflags
- getfilesystemencodeerrors
- getfilesystemencoding
- getprofile
- getrecursionlimit
- getrefcount
- getsizeof
- getswitchinterval
- gettrace
- hash_info
- hexversion
- implementation
- int_info
- intern
- is_finalizing
- last_traceback

- last_type
- last_value
- maxsize
- maxunicode
- meta_path
- modules
- orig_argv
- path
- path_hooks
- path_importer_cache
- platform
- platlibdir
- prefix
- ps1
- ps2
- ps3
- pycache_prefix
- set_asyncgen_hooks
- set_coroutine_origin_tracking_depth
- set_int_max_str_digits
- setdlopenflags
- setprofile
- setrecursionlimit
- setswitchinterval
- settrace
- stderr
- stdin
- stdlib_module_names
- stdout
- thread_info
- unraisablehook
- version
- version_info

- warnoptions

Library: json

- JSONDecodeError
- JSONDecoder
- JSONEncoder
- codecs
- decoder
- detect_encoding
- dump
- dumps
- encoder
- load
- loads
- scanner

Library: re

- A
- ASCII
- DEBUG
- DOTALL
- I
- IGNORECASE
- L
- LOCALE
- M
- MULTILINE
- Match
- NOFLAG
- Pattern
- RegexFlag
- S

- Scanner
- T
- TEMPLATE
- U
- UNICODE
- VERBOSE
- X
- compile
- copyreg
- enum
- error
- escape
- findall
- finditer
- fullmatch
- functools
- match
- purge
- search
- split
- sub
- subn
- template

Library: time

- CLOCK_BOOTTIME
- CLOCK_MONOTONIC
- CLOCK_MONOTONIC_RAW
- CLOCK_PROCESS_CPUTIME_ID
- CLOCK_REALTIME
- CLOCK_TAI
- CLOCK_THREAD_CPUTIME_ID
- altzone

- asctime
- clock_getres
- clock_gettime
- clock_gettime_ns
- clock_settime
- clock_settime_ns
- ctime
- daylight
- get_clock_info
- gmtime
- localtime
- mktime
- monotonic
- monotonic_ns
- perf_counter
- perf_counter_ns
- process_time
- process_time_ns
- pthread_getcpuclockid
- sleep
- strftime
- strptime
- struct_time
- thread_time
- thread_time_ns
- time
- time_ns
- timezone
- tzname
- tzset

Library: statistics

- Counter

- Decimal
- Fraction
- LinearRegression
- NormalDist
- StatisticsError
- bisect_left
- bisect_right
- correlation
- covariance
- defaultdict
- erf
- exp
- fabs
- fmean
- fsum
- geometric_mean
- groupby
- harmonic_mean
- hypot
- linear_regression
- log
- math
- mean
- median
- median_grouped
- median_high
- median_low
- mode
- mul
- multimode
- namedtuple
- numbers
- pstdev

- pvariance
- quantiles
- random
- reduce
- repeat
- sqrt
- stdev
- sys
- tau
- variance

Library: functools

- GenericAlias
- RLock
- WRAPPER_ASSIGNMENTS
- WRAPPER_UPDATES
- cache
- cached_property
- cmp_to_key
- get_cache_token
- lru_cache
- namedtuple
- partial
- partialmethod
- recursive_repr
- reduce
- singledispatch
- singledispatchmethod
- total_ordering
- update_wrapper
- wraps

Library: itertools

- accumulate
- chain
- combinations
- combinations_with_replacement
- compress
- count
- cycle
- dropwhile
- filterfalse
- groupby
- islice
- pairwise
- permutations
- product
- repeat
- starmap
- takewhile
- tee
- zip_longest