**Python Date Type:**



**String Methods:**

|  |  |
| --- | --- |
| Method | Description |
| [capitalize()](https://www.w3schools.com/python/ref_string_capitalize.asp) | Converts the first character to upper case |
| [casefold()](https://www.w3schools.com/python/ref_string_casefold.asp) | Converts string into lower case |
| [center()](https://www.w3schools.com/python/ref_string_center.asp) | Returns a centered string |
| [count()](https://www.w3schools.com/python/ref_string_count.asp) | Returns the number of times a specified value occurs in a string |
| [encode()](https://www.w3schools.com/python/ref_string_encode.asp) | Returns an encoded version of the string |
| [endswith()](https://www.w3schools.com/python/ref_string_endswith.asp) | Returns true if the string ends with the specified value |
| [expandtabs()](https://www.w3schools.com/python/ref_string_expandtabs.asp) | Sets the tab size of the string |
| [find()](https://www.w3schools.com/python/ref_string_find.asp) | Searches the string for a specified value and returns the position of where it was found |
| [format()](https://www.w3schools.com/python/ref_string_format.asp) | Formats specified values in a string |
| format\_map() | Formats specified values in a string |
| [index()](https://www.w3schools.com/python/ref_string_index.asp) | Searches the string for a specified value and returns the position of where it was found |
| [isalnum()](https://www.w3schools.com/python/ref_string_isalnum.asp) | Returns True if all characters in the string are alphanumeric |
| [isalpha()](https://www.w3schools.com/python/ref_string_isalpha.asp) | Returns True if all characters in the string are in the alphabet |
| [isascii()](https://www.w3schools.com/python/ref_string_isascii.asp) | Returns True if all characters in the string are ascii characters |
| [isdecimal()](https://www.w3schools.com/python/ref_string_isdecimal.asp) | Returns True if all characters in the string are decimals |
| [isdigit()](https://www.w3schools.com/python/ref_string_isdigit.asp) | Returns True if all characters in the string are digits |
| [isidentifier()](https://www.w3schools.com/python/ref_string_isidentifier.asp) | Returns True if the string is an identifier |
| [islower()](https://www.w3schools.com/python/ref_string_islower.asp) | Returns True if all characters in the string are lower case |
| [isnumeric()](https://www.w3schools.com/python/ref_string_isnumeric.asp) | Returns True if all characters in the string are numeric |
| [isprintable()](https://www.w3schools.com/python/ref_string_isprintable.asp) | Returns True if all characters in the string are printable |
| [isspace()](https://www.w3schools.com/python/ref_string_isspace.asp) | Returns True if all characters in the string are whitespaces |
| [istitle()](https://www.w3schools.com/python/ref_string_istitle.asp) | Returns True if the string follows the rules of a title |
| [isupper()](https://www.w3schools.com/python/ref_string_isupper.asp) | Returns True if all characters in the string are upper case |
| [join()](https://www.w3schools.com/python/ref_string_join.asp) | Converts the elements of an iterable into a string |
| [ljust()](https://www.w3schools.com/python/ref_string_ljust.asp) | Returns a left justified version of the string |
| [lower()](https://www.w3schools.com/python/ref_string_lower.asp) | Converts a string into lower case |
| [lstrip()](https://www.w3schools.com/python/ref_string_lstrip.asp) | Returns a left trim version of the string |
| [maketrans()](https://www.w3schools.com/python/ref_string_maketrans.asp) | Returns a translation table to be used in translations |
| [partition()](https://www.w3schools.com/python/ref_string_partition.asp) | Returns a tuple where the string is parted into three parts |
| [replace()](https://www.w3schools.com/python/ref_string_replace.asp) | Returns a string where a specified value is replaced with a specified value |
| [rfind()](https://www.w3schools.com/python/ref_string_rfind.asp) | Searches the string for a specified value and returns the last position of where it was found |
| [rindex()](https://www.w3schools.com/python/ref_string_rindex.asp) | Searches the string for a specified value and returns the last position of where it was found |
| [rjust()](https://www.w3schools.com/python/ref_string_rjust.asp) | Returns a right justified version of the string |
| [rpartition()](https://www.w3schools.com/python/ref_string_rpartition.asp) | Returns a tuple where the string is parted into three parts |
| [rsplit()](https://www.w3schools.com/python/ref_string_rsplit.asp) | Splits the string at the specified separator, and returns a list |
| [rstrip()](https://www.w3schools.com/python/ref_string_rstrip.asp) | Returns a right trim version of the string |
| [split()](https://www.w3schools.com/python/ref_string_split.asp) | Splits the string at the specified separator, and returns a list |
| [splitlines()](https://www.w3schools.com/python/ref_string_splitlines.asp) | Splits the string at line breaks and returns a list |
| [startswith()](https://www.w3schools.com/python/ref_string_startswith.asp) | Returns true if the string starts with the specified value |
| [strip()](https://www.w3schools.com/python/ref_string_strip.asp) | Returns a trimmed version of the string |
| [swapcase()](https://www.w3schools.com/python/ref_string_swapcase.asp) | Swaps cases, lower case becomes upper case and vice versa |
| [title()](https://www.w3schools.com/python/ref_string_title.asp) | Converts the first character of each word to upper case |
| [translate()](https://www.w3schools.com/python/ref_string_translate.asp) | Returns a translated string |
| [upper()](https://www.w3schools.com/python/ref_string_upper.asp) | Converts a string into upper case |
| [zfill()](https://www.w3schools.com/python/ref_string_zfill.asp) | Fills the string with a specified number of 0 values at the beginning |

Note: All string methods returns new values. They do not change the original string.

**List Methods:**

Python has a set of built-in methods that you can use on lists/arrays.

|  |  |
| --- | --- |
| Method | Description |
| [append()](https://www.w3schools.com/python/ref_list_append.asp) | Adds an element at the end of the list |
| [clear()](https://www.w3schools.com/python/ref_list_clear.asp) | Removes all the elements from the list |
| [copy()](https://www.w3schools.com/python/ref_list_copy.asp) | Returns a copy of the list |
| [count()](https://www.w3schools.com/python/ref_list_count.asp) | Returns the number of elements with the specified value |
| [extend()](https://www.w3schools.com/python/ref_list_extend.asp) | Add the elements of a list (or any iterable), to the end of the current list |
| [index()](https://www.w3schools.com/python/ref_list_index.asp) | Returns the index of the first element with the specified value |
| [insert()](https://www.w3schools.com/python/ref_list_insert.asp) | Adds an element at the specified position |
| [pop()](https://www.w3schools.com/python/ref_list_pop.asp) | Removes the element at the specified position |
| [remove()](https://www.w3schools.com/python/ref_list_remove.asp) | Removes the first item with the specified value |
| [reverse()](https://www.w3schools.com/python/ref_list_reverse.asp) | Reverses the order of the list |
| [sort()](https://www.w3schools.com/python/ref_list_sort.asp) | Sorts the list |

Note: Python does not have built-in support for Arrays, but Python Lists can be used instead.

**Dictionaries Methods:**

Python has a set of built-in methods that you can use on dictionaries.

|  |  |
| --- | --- |
| Method | Description |
| [clear()](https://www.w3schools.com/python/ref_dictionary_clear.asp) | Removes all the elements from the dictionary |
| [copy()](https://www.w3schools.com/python/ref_dictionary_copy.asp) | Returns a copy of the dictionary |
| [fromkeys()](https://www.w3schools.com/python/ref_dictionary_fromkeys.asp) | Returns a dictionary with the specified keys and value |
| [get()](https://www.w3schools.com/python/ref_dictionary_get.asp) | Returns the value of the specified key |
| [items()](https://www.w3schools.com/python/ref_dictionary_items.asp) | Returns a list containing a tuple for each key value pair |
| [keys()](https://www.w3schools.com/python/ref_dictionary_keys.asp) | Returns a list containing the dictionary's keys |
| [pop()](https://www.w3schools.com/python/ref_dictionary_pop.asp) | Removes the element with the specified key |
| [popitem()](https://www.w3schools.com/python/ref_dictionary_popitem.asp) | Removes the last inserted key-value pair |
| [setdefault()](https://www.w3schools.com/python/ref_dictionary_setdefault.asp) | Returns the value of the specified key. If the key does not exist: insert the key, with the specified value |
| [update()](https://www.w3schools.com/python/ref_dictionary_update.asp) | Updates the dictionary with the specified key-value pairs |
| [values()](https://www.w3schools.com/python/ref_dictionary_values.asp) | Returns a list of all the values in the dictionary |

Learn more about dictionaries in our [Python Dictionaries Tutorial](https://www.w3schools.com/python/python_dictionaries.asp).

**Tuple Methods:**

Python has two built-in methods that you can use on tuples.

|  |  |
| --- | --- |
| Method | Description |
| [count()](https://www.w3schools.com/python/ref_tuple_count.asp) | Returns the number of times a specified value occurs in a tuple |
| [index()](https://www.w3schools.com/python/ref_tuple_index.asp) | Searches the tuple for a specified value and returns the position of where it was found |

**Set Methods:**

Python has a set of built-in methods that you can use on sets.

|  |  |
| --- | --- |
| Method | Description |
| [add()](https://www.w3schools.com/python/ref_set_add.asp) | Adds an element to the set |
| [clear()](https://www.w3schools.com/python/ref_set_clear.asp) | Removes all the elements from the set |
| [copy()](https://www.w3schools.com/python/ref_set_copy.asp) | Returns a copy of the set |
| [difference()](https://www.w3schools.com/python/ref_set_difference.asp) | Returns a set containing the difference between two or more sets |
| [difference\_update()](https://www.w3schools.com/python/ref_set_difference_update.asp) | Removes the items in this set that are also included in another, specified set |
| [discard()](https://www.w3schools.com/python/ref_set_discard.asp) | Remove the specified item |
| [intersection()](https://www.w3schools.com/python/ref_set_intersection.asp) | Returns a set, that is the intersection of two or more sets |
| [intersection\_update()](https://www.w3schools.com/python/ref_set_intersection_update.asp) | Removes the items in this set that are not present in other, specified set(s) |
| [isdisjoint()](https://www.w3schools.com/python/ref_set_isdisjoint.asp) | Returns whether two sets have a intersection or not |
| [issubset()](https://www.w3schools.com/python/ref_set_issubset.asp) | Returns whether another set contains this set or not |
| [issuperset()](https://www.w3schools.com/python/ref_set_issuperset.asp) | Returns whether this set contains another set or not |
| [pop()](https://www.w3schools.com/python/ref_set_pop.asp) | Removes an element from the set |
| [remove()](https://www.w3schools.com/python/ref_set_remove.asp) | Removes the specified element |
| [symmetric\_difference()](https://www.w3schools.com/python/ref_set_symmetric_difference.asp) | Returns a set with the symmetric differences of two sets |
| [symmetric\_difference\_update()](https://www.w3schools.com/python/ref_set_symmetric_difference_update.asp) | inserts the symmetric differences from this set and another |
| [union()](https://www.w3schools.com/python/ref_set_union.asp) | Return a set containing the union of sets |
| [update()](https://www.w3schools.com/python/ref_set_update.asp) | Update the set with another set, or any other iterable |

**Python Keywords**

Python has a set of keywords that are reserved words that cannot be used as variable names, function names, or any other identifiers:

|  |  |
| --- | --- |
| Keyword | Description |
| [and](https://www.w3schools.com/python/ref_keyword_and.asp) | A logical operator |
| [as](https://www.w3schools.com/python/ref_keyword_as.asp) | To create an alias |
| [assert](https://www.w3schools.com/python/ref_keyword_assert.asp) | For debugging |
| [break](https://www.w3schools.com/python/ref_keyword_break.asp) | To break out of a loop |
| [class](https://www.w3schools.com/python/ref_keyword_class.asp) | To define a class |
| [continue](https://www.w3schools.com/python/ref_keyword_continue.asp) | To continue to the next iteration of a loop |
| [def](https://www.w3schools.com/python/ref_keyword_def.asp) | To define a function |
| [del](https://www.w3schools.com/python/ref_keyword_del.asp) | To delete an object |
| [elif](https://www.w3schools.com/python/ref_keyword_elif.asp) | Used in conditional statements, same as else if |
| [else](https://www.w3schools.com/python/ref_keyword_else.asp) | Used in conditional statements |
| [except](https://www.w3schools.com/python/ref_keyword_except.asp) | Used with exceptions, what to do when an exception occurs |
| [False](https://www.w3schools.com/python/ref_keyword_false.asp) | Boolean value, result of comparison operations |
| [finally](https://www.w3schools.com/python/ref_keyword_finally.asp) | Used with exceptions, a block of code that will be executed no matter if there is an exception or not |
| [for](https://www.w3schools.com/python/ref_keyword_for.asp) | To create a for loop |
| [from](https://www.w3schools.com/python/ref_keyword_from.asp) | To import specific parts of a module |
| [global](https://www.w3schools.com/python/ref_keyword_global.asp) | To declare a global variable |
| [if](https://www.w3schools.com/python/ref_keyword_if.asp) | To make a conditional statement |
| [import](https://www.w3schools.com/python/ref_keyword_import.asp) | To import a module |
| [in](https://www.w3schools.com/python/ref_keyword_in.asp) | To check if a value is present in a list, tuple, etc. |
| [is](https://www.w3schools.com/python/ref_keyword_is.asp) | To test if two variables are equal |
| [lambda](https://www.w3schools.com/python/ref_keyword_lambda.asp) | To create an anonymous function |
| [None](https://www.w3schools.com/python/ref_keyword_none.asp) | Represents a null value |
| [nonlocal](https://www.w3schools.com/python/ref_keyword_nonlocal.asp) | To declare a non-local variable |
| [not](https://www.w3schools.com/python/ref_keyword_not.asp) | A logical operator |
| [or](https://www.w3schools.com/python/ref_keyword_or.asp) | A logical operator |
| [pass](https://www.w3schools.com/python/ref_keyword_pass.asp) | A null statement, a statement that will do nothing |
| [raise](https://www.w3schools.com/python/ref_keyword_raise.asp) | To raise an exception |
| [return](https://www.w3schools.com/python/ref_keyword_return.asp) | To exit a function and return a value |
| [True](https://www.w3schools.com/python/ref_keyword_true.asp) | Boolean value, result of comparison operations |
| [try](https://www.w3schools.com/python/ref_keyword_try.asp) | To make a try...except statement |
| [while](https://www.w3schools.com/python/ref_keyword_while.asp) | To create a while loop |
| with | Used to simplify exception handling |
| yield | To end a function, returns a generator |

Python Collections (Arrays)

There are four collection data types in the Python programming language:

[List](https://www.w3schools.com/python/python_lists.asp) is a collection which is ordered and changeable. Allows duplicate members.

[Tuple](https://www.w3schools.com/python/python_tuples.asp) is a collection which is ordered and unchangeable. Allows duplicate members.

Set is a collection which is unordered, unchangeable\*, and unindexed. No duplicate members.

[Dictionary](https://www.w3schools.com/python/python_dictionaries.asp) is a collection which is ordered\*\* and changeable. No duplicate members.