

## :mod:`tomllib` --- Parse TOML files

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 1); [backlink](#)**

Unknown interpreted text role "mod".

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 4)**

Unknown directive type "module".

```
.. module:: tomllib
   :synopsis: Parse TOML files.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 7)**

Unknown directive type "versionadded".

```
.. versionadded:: 3.11
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 9)**

Unknown directive type "moduleauthor".

```
.. moduleauthor:: Taneli Hukkinen
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 10)**

Unknown directive type "sectionauthor".

```
.. sectionauthor:: Taneli Hukkinen
```

**Source code:** :source:`Lib/tomllib`

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 12); [backlink](#)**

Unknown interpreted text role "source".

This module provides an interface for parsing TOML (Tom's Obvious Minimal Language, <https://tomli.io>). This module does not support writing TOML.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 20)**

Unknown directive type "seealso".

```
.. seealso::
```

```
The `Tomli-W package <https://pypi.org/project/tomli-w/>`__
is a TOML writer that can be used in conjunction with this module,
providing a write API familiar to users of the standard library
:mod:`marshal` and :mod:`pickle` modules.
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 27)**

Unknown directive type "seealso".

```
.. seealso::
```

The `TOML Kit` package <<https://pypi.org/project/tomlkit/>>`\_\_ is a style-preserving TOML library with both read and write capability. It is a recommended replacement for this module for editing already existing TOML files.

This module defines the following functions:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 37)**

Unknown directive type "function".

```
.. function:: load(fp, /, *, parse_float=float)
```

Read a TOML file. The first argument should be a readable and binary file object. Return a `:class:`dict``. Convert TOML types to Python using this `:ref:`conversion table <toml-to-py-table>``.

`*parse_float*` will be called with the string of every TOML float to be decoded. By default, this is equivalent to ``float(num_str)``. This can be used to use another datatype or parser for TOML floats (e.g. `:class:`decimal.Decimal``). The callable must not return a `:class:`dict`` or a `:class:`list``, else a `:exc:`ValueError`` is raised.

A `:exc:`TOMLDecodeError`` will be raised on an invalid TOML document.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 52)**

Unknown directive type "function".

```
.. function:: loads(s, /, *, parse_float=float)
```

Load TOML from a `:class:`str`` object. Return a `:class:`dict``. Convert TOML types to Python using this `:ref:`conversion table <toml-to-py-table>``. The `*parse_float*` argument has the same meaning as in `:func:`load``.

A `:exc:`TOMLDecodeError`` will be raised on an invalid TOML document.

The following exceptions are available:

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\ (cpython-main) (Doc) (library) tomllib.rst, line 63)**

Unknown directive type "exception".

```
.. exception:: TOMLDecodeError
```

Subclass of `:exc:`ValueError``.

## Examples

Parsing a TOML file:

```
import tomllib

with open("pyproject.toml", "rb") as f:
    data = tomllib.load(f)
```

Parsing a TOML string:

```
import tomllib

toml_str = """
python-version = "3.11.0"
python-implementation = "CPython"
"""
```

```
data = tomllib.loads(toml_str)
```

## Conversion Table

TOML	Python
table	dict
string	str
integer	int
float	float (configurable with <i>parse_float</i> )
boolean	bool
offset date-time	datetime.datetime (tzinfo attribute set to an instance of datetime.timezone)
local date-time	datetime.datetime (tzinfo attribute set to None)
local date	datetime.date
local time	datetime.time
array	list