

Standard Library

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|-------------------|---|
| import | Description of module |
| datetime | Basic date and time types |
| time | Time access and conversions |
| pprint | Pretty printer |
| math | Mathematical functions |
| shutil | High-level file operations |
| os | Operating system agnostic operations |
| tarfile | Read / write tar archives. |
| csv | CSV File reading and writing |
| hashlib | Secure hashes and message digests |
| argparse | Parser for command-line options |
| getpass | Prompt for password without echo |
| curses | Terminal handling for character-cell displays |
| threading | Thread-based parallelism |
| email | An email and MIME handling package |
| json | JSON encoder and decoder |
| html | HyperText Markup Language support |
| webbrowser | Convenient Web-browser controller |
| telnetlib | Telnet client |
| turtle | Turtle graphics |
| tkinter | Python interface to Tcl/Tk |
| socket | Low-level network interfacing |
| re | Regex pattern matching library |

Using pip to connect to PyPi.org

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| Installing pip on Ubuntu 18.04 |
| <code>sudo apt install python3-pip</code> |
| Using pip to install from PyPi.org |
| <code>python3 -m pip install <pkg></code> |
| Installing user-specific packages with pip |
| <code>python3 -m pip install <pkg> --user</code> |

Helpful Coding Tools

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| Notepad++ | Windows supported text editor |
| PyCharm | A Python IDE for developers |
| Atom | A hackable text editor |
| Sublime | Another popular text editor |
| Jupyter Notebook | Open web app for live Python code development |
| GitHub Desktop | A GUI based git client |

Install with pip from PyPi.org

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| <code>python3 -m pip install</code> | import | Description of package. |
| requests | requests | Simplifies HTTP requests. |
| matplotlib | matplotlib | Produce excel quality graphs and charts, output as *.png or *.pdf |
| pyyaml | yaml | YAML encoder and decoder. |
| numpy | numpy | Advanced math functionality. A required dependency for many other packages. |
| scipy | scipy | Library of algorithms and mathematical tools. |
| selenium | selenium | Automation of popular web-browsers. Requires a web-browser driver to function. |
| pandas | pandas | Create and work with data frames from CSV, Excel and database sources. |
| pillow | pillow | Python Imaging Library fork that can be used to change between image formats. |
| pygame | pygame | Interact with users through input devices. |
| flask | flask | A web-framework popular for creating HTTP accessible APIs. |
| scrapy | scrapy | Page scraping, and data mining tool. |
| tensorflow | tensorflow | An artificial intelligence library, using data flow graphs to build models. |