

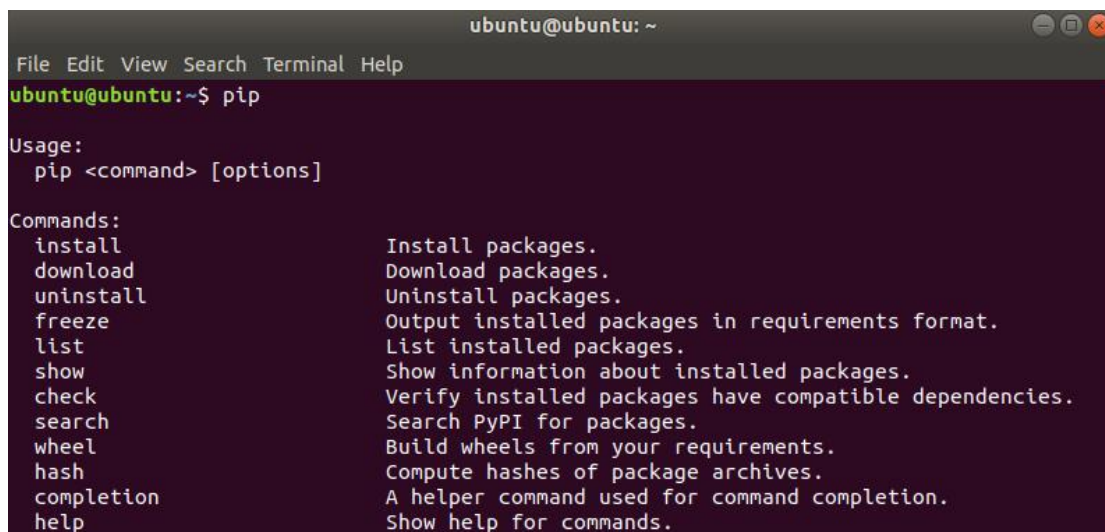
Lesson 12 Usage of Python PiP

1. Brief Introduction

pip is a management tool for Python package offering searching, downloading, installing and uninstalling function. Most of packages are built-in or are installed by pip. Python 2.7.9 +, Python 3.4+ and other versions above come with pip tool.

2. Download and Install

Open command line terminal, and then input “pip”. When the following message pops up, pip has been installed already.

A screenshot of a terminal window titled 'ubuntu@ubuntu: ~'. The terminal shows the command 'pip' being entered at the prompt 'ubuntu@ubuntu:~\$'. The output displays the usage and a list of commands for pip. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'.

```
ubuntu@ubuntu: ~
File Edit View Search Terminal Help
ubuntu@ubuntu:~$ pip
Usage:
  pip <command> [options]

Commands:
  install          Install packages.
  download         Download packages.
  uninstall        Uninstall packages.
  freeze           Output installed packages in requirements format.
  list             List installed packages.
  show             Show information about installed packages.
  check            Verify installed packages have compatible dependencies.
  search           Search PyPI for packages.
  wheel            Build wheels from your requirements.
  hash             Compute hashes of package archives.
  completion       A helper command used for command completion.
  help            Show help for commands.
```

If pip is not installed, input command “**sudo apt install python-pip**” to install. After the command is executed, you will be required to input the password, and then select “y” to continue installation.

```

ubuntu@ubuntu: ~
File Edit View Search Terminal Help
ubuntu@ubuntu:~$ sudo apt install python-pip
[sudo] password for ubuntu:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  build-essential dpkg-dev fakeroot g++ g++-7 libalgorithm-diff-perl libalgorithm-diff-xs-perl
  libalgorithm-merge-perl libexpat1-dev libfakeroot libpython-all-dev libpython-dev
  libpython-stdlib libpython2.7-dev libstdc++-7-dev make python python-all python-all-dev pyt
  hon-asn1crypto python-cffi-backend python-crypto python-cryptography python-dbus
  python-dev python-enum34 python-gi python-idna python-ipaddress python-keyring python-keyri
  ngs.alt python-minimal python-pip-whl python-pkg-resources python-secretstorage
  python-setuptools python-six python-wheel python-xdg python2.7 python2.7-dev python2.7-mini
  mal
Suggested packages:
  debian-keyring g++-multilib g++-7-multilib gcc-7-doc libstdc++6-7-dbg libstdc++-7-doc make-
  doc python-doc python-tk python-crypto-doc python-cryptography-doc
  python-cryptography-vectors python-dbus-dbg python-dbus-doc python-enum34-doc python-gi-cai
  ro libkf5wallet-bin gir1.2-gnomekeyring-1.0 python-fs python-gdata python-keyczar
  python-secretstorage-doc python-setuptools-doc python2.7-doc binfmt-support
The following NEW packages will be installed:
  build-essential dpkg-dev fakeroot g++ g++-7 libalgorithm-diff-perl libalgorithm-diff-xs-perl
  libalgorithm-merge-perl libexpat1-dev libfakeroot libpython-all-dev libpython-dev
  libpython-stdlib libpython2.7-dev libstdc++-7-dev make python python-all python-all-dev pyt
  hon-asn1crypto python-cffi-backend python-crypto python-cryptography python-dbus
  python-dev python-enum34 python-gi python-idna python-ipaddress python-keyring python-keyri
  ngs.alt python-minimal python-pip python-pip-whl python-pkg-resources
  python-secretstorage python-setuptools python-six python-wheel python-xdg python2.7 python2
  .7-dev python2.7-minimal
0 upgraded, 43 newly installed, 0 to remove and 0 not upgraded.
Need to get 45.9 MB of archives.
After this operation, 104 MB of additional disk space will be used.
Do you want to continue? [Y/n] y

```

3. Common Command

1) install: Install the command package, and the complete command is “**pip install packagename**”

```

ubuntu@ubuntu: ~
File Edit View Search Terminal Help
ubuntu@ubuntu:~$ pip install packagename

```

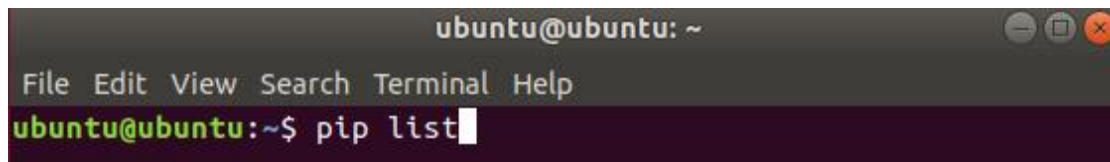
2) uninstall: Uninstall the designated package, and the complete command is “**pip uninstall packagename**”

```

ubuntu@ubuntu: ~
File Edit View Search Terminal Help
ubuntu@ubuntu:~$ pip uninstall packagename

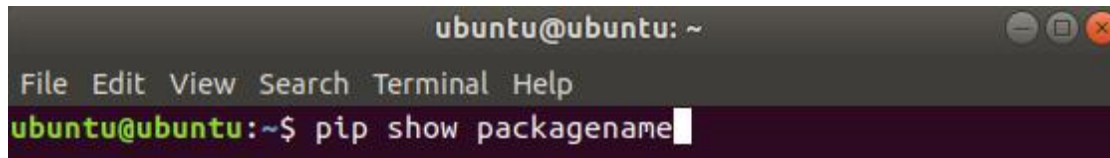
```

3) list: List the installed package, and the complete command is “**pip list**”

A terminal window titled 'ubuntu@ubuntu: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'ubuntu@ubuntu:~\$' and the command 'pip list' is being entered, with a cursor at the end of the line.

```
ubuntu@ubuntu: ~  
File Edit View Search Terminal Help  
ubuntu@ubuntu:~$ pip list
```

4) show: View the information about the installed packages, and the complete command is “**pip show packagename**”.

A terminal window titled 'ubuntu@ubuntu: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is 'ubuntu@ubuntu:~\$' and the command 'pip show packagename' is being entered, with a cursor at the end of the line.

```
ubuntu@ubuntu: ~  
File Edit View Search Terminal Help  
ubuntu@ubuntu:~$ pip show packagename
```