

1.Install Apache server(httpd) using yum

A:

```
[pranay@localhost ~]$ sudo yum install httpd
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: centos.excellmedia.net
 * extras: centos.excellmedia.net
 * updates: centos.excellmedia.net
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.6-98.el7.centos.7 will be installed
--> Processing Dependency: httpd-tools = 2.4.6-98.el7.centos.7 for package: httpd-2.4.6-98.el7.centos.7.x86_64
--> Processing Dependency: system-logos >= 7.92.1-1 for package: httpd-2.4.6-98.el7.centos.7.x86_64
--> Processing Dependency: /etc/mime.types for package: httpd-2.4.6-98.el7.centos.7.x86_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.4.6-98.el7.centos.7.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.4.6-98.el7.centos.7.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.4.8-7.el7 will be installed
--> Package apr-util.x86_64 0:1.5.2-6.el7 will be installed
--> Package centos-logos.noarch 0:70.0.6-3.el7.centos will be installed
--> Package httpd-tools.x86_64 0:2.4.6-98.el7.centos.7 will be installed
--> Package mailcap.noarch 0:2.1.41-2.el7 will be installed
--> Finished Dependency Resolution
```

```
[pranay@localhost ~]$ httpd -version
Server version: Apache/2.4.6 (CentOS)
Server built:   Apr  5 2023 17:18:30
[pranay@localhost ~]$
```

2.Install python version above 3 using zip/tgz source code installation

A:

```
[pranay@localhost python_pg]$ sudo wget https://www.python.org/ftp/python/3.11.3/Python-3.11.3.tar.xz
--2023-05-21 18:53:45-- https://www.python.org/ftp/python/3.11.3/Python-3.11.3.tar.xz
Resolving www.python.org (www.python.org)... 199.232.20.223, 2a04:4e42:42::223
Connecting to www.python.org (www.python.org)|199.232.20.223|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 19906156 (19M) [application/octet-stream]
Saving to: 'Python-3.11.3.tar.xz'

100%[=====] 19,906,156  5.52MB/s  in 3.6s

2023-05-21 18:53:49 (5.30 MB/s) - 'Python-3.11.3.tar.xz' saved [19906156/19906156]
```

```
[pranay@localhost python_pg]$ sudo tar xvf Python-3.11.3.tar.xz
Python-3.11.3/
Python-3.11.3/Mac/
Python-3.11.3/Mac/README.rst
Python-3.11.3/Mac/Icons/
Python-3.11.3/Mac/Icons/PythonLauncher.icns
Python-3.11.3/Mac/Icons/IDLE.icns
Python-3.11.3/Mac/Icons/PythonCompiled.icns
Python-3.11.3/Mac/Icons/ReadMe.txt
Python-3.11.3/Mac/Icons/PythonSource.icns
Python-3.11.3/Mac/Icons/Disk Image.icns
Python-3.11.3/Mac/Icons/Python Folder.icns
Python-3.11.3/Mac/Tools/
Python-3.11.3/Mac/Tools/pythonw.c
Python-3.11.3/Mac/Tools/plistlib_generate_testdata.py
Python-3.11.3/Mac/Makefile.in
Python-3.11.3/Mac/Resources/
Python-3.11.3/Mac/Resources/framework/
Python-3.11.3/Mac/Resources/framework/Info.plist.in
Python-3.11.3/Mac/Resources/app/
```

```
>>> print("hello world")
hello world
```

3.Display the python3 version using command

A:

```
[pranay@localhost ~]$ python3 --version
Python 3.11.3
```

4.Install any software using rpm-i

A:

```
[pranay@localhost ~]$ wget http://mirror.centos.org/centos/7/updates/x86_64/Packages/ksh-20120801-144.el7_9.x86_64.rpm
--2023-05-23 14:13:19-- http://mirror.centos.org/centos/7/updates/x86_64/Packages/ksh-20120801-144.el7_9.x86_64.rpm
Resolving mirror.centos.org (mirror.centos.org)... 13.231.175.254, 2406:dala:fc2:2f03:7adc:fea2:8465:cce2
Connecting to mirror.centos.org (mirror.centos.org)|13.231.175.254|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 906268 (885K) [application/x-rpm]
Saving to: 'ksh-20120801-144.el7_9.x86_64.rpm'

100%[=====>] 906,268      508KB/s   in 1.7s

2023-05-23 14:13:21 (508 KB/s) - 'ksh-20120801-144.el7_9.x86_64.rpm' saved [906268/906268]

[pranay@localhost ~]$ ls -ltr
total 1628
-rw-r--r--. 1 pranay pranay1 755640 Oct 14  2020 ModemManager-1.6.10-4.el7.x86_64.rpm
-rw-r--r--. 1 pranay pranay1 906268 Aug 10  2022 ksh-20120801-144.el7_9.x86_64.rpm
[pranay@localhost ~]$ sudo rpm -ivh ksh-20120801-144.el7_9.x86_64.rpm
[sudo] password for pranay:
Preparing...                ##### [100%]
Updating / installing...
 1:ksh-20120801-144.el7_9    ##### [100%]
[pranay@localhost ~]$
```

5.Uninstall Apache server

A:

```
[pranay@localhost ~]$ sudo yum remove httpd
Loaded plugins: fastestmirror
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.4.6-98.el7.centos.7 will be erased
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch             Version           Repository        Size
=====
Removing:
httpd                  x86_64           2.4.6-98.el7.centos.7 @updates         9.4 M

Transaction Summary
=====
Remove 1 Package

Installed size: 9.4 M
Is this ok [y/N]: y
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Warning: RPMDB altered outside of yum.
Erasing      : httpd-2.4.6-98.el7.centos.7.x86_64      1/1
Verifying    : httpd-2.4.6-98.el7.centos.7.x86_64      1/1

Removed:
httpd.x86_64 0:2.4.6-98.el7.centos.7
```

6.Uninstall the software which is installed in step4 using “rpm-e” command

A:

```
[pranay@localhost ~]$ sudo rpm -evh ksh-20120801-144.el7_9.x86_64
Preparing...                               ##### [100%]
Cleaning up / removing...
 1:ksh-20120801-144.el7_9                  ##### [100%]
[pranay@localhost ~]$
```

7.Write the command to list all the packages installed using yum

A:

```
[pranay@localhost ~]$ sudo yum history
Loaded plugins: fastestmirror
ID      | Login user      | Date and time   | Action(s)      | Altered
-----|-----|-----|-----|-----
 7      | my main area <pranay> | 2023-05-23 14:24 | Erase          | 1 <
 6      | my main area <pranay> | 2023-05-21 18:52 | Install        | 1 >
 5      | my main area <pranay> | 2023-05-21 18:50 | Install        | 2
 4      | my main area <pranay> | 2023-05-21 18:49 | I, U           | 12
 3      | my main area <pranay> | 2023-05-21 17:47 | Install        | 6
 2      | root <root>        | 2023-05-08 15:50 | Update         | 3
 1      | System <unset>     | 2020-04-30 22:05 | Install        | 325
Warning: RPMDB altered outside of yum.
history list
[pranay@localhost ~]$
```