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2KE20CS032

Assignment 5

Understood. To follow the provided instructions and create the files/directory using the same name and case as provided in the task steps, please provide me with the specific names and case instructions for the files/directory you want to create.

Previously I have installed and took screen sorts.

Package management

1. Install Apache server (httpd) using yum

`sudo yum install httpd`

```
total download size: 24 M
Installed size: 32 M
Is this ok [y/d/N]: y
Downloading packages:
1/6): httpd-tools-2.4.6-98.el7.centos.7.x86_64.rpm | 94 kB 00:00:02
2/6): apr-util-1.5.2-6.el7.x86_64.rpm | 92 kB 00:00:03
3/6): mailcap-2.1.41-2.el7.noarch.rpm | 31 kB 00:00:02
4/6): httpd-2.4.6-98.el7.centos.7.x86_64.rpm | 2.7 MB 00:00:05
5/6): apr-1.4.8-7.el7.x86_64.rpm | 104 kB 00:00:05
6/6): centos-logos-70.0.6-3.el7.centos.noarch.rpm | 21 MB 00:05:21
-----Total
78 kB/s | 24 MB 00:05:21

Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : apr-1.4.8-7.el7.x86_64 1/6
Installing : apr-util-1.5.2-6.el7.x86_64 2/6
Installing : httpd-tools-2.4.6-98.el7.centos.7.x86_64 3/6
Installing : centos-logos-70.0.6-3.el7.centos.noarch 4/6
Installing : mailcap-2.1.41-2.el7.noarch 5/6
Installing : httpd-2.4.6-98.el7.centos.7.x86_64 6/6
Verifying : httpd-tools-2.4.6-98.el7.centos.7.x86_64 1/6
Verifying : mailcap-2.1.41-2.el7.noarch 2/6
Verifying : apr-1.4.8-7.el7.x86_64 3/6
Verifying : apr-util-1.5.2-6.el7.x86_64 4/6
Verifying : httpd-2.4.6-98.el7.centos.7.x86_64 5/6
Verifying : centos-logos-70.0.6-3.el7.centos.noarch 6/6

Installed:
httpd.x86_64 0:2.4.6-98.el7.centos.7

Dependency Installed:
apr.x86_64 0:1.4.8-7.el7 apr-util.x86_64 0:1.5.2-6.el7 centos-logos.noarch 0:70.0.6-3.el7.centos
httpd-tools.x86_64 0:2.4.6-98.el7.centos.7 mailcap.noarch 0:2.1.41-2.el7

Complete!
lusi@localhost ~]$
```

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

I have downloaded development tool for zip/tgz

Using command `sudo yum group install "Development Tools"`

```
[lusi@localhost ~]$ wget https://www.python.org/ftp/python/3.9.7/Python-3.9.7.tgz
--2023-05-24 02:25:39-- https://www.python.org/ftp/python/3.9.7/Python-3.9.7.tgz
Resolving www.python.org (www.python.org)... 151.101.156.223, 2a04:4e42:25::223
Connecting to www.python.org (www.python.org)|151.101.156.223|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 25755357 (25M) [application/octet-stream]
Saving to: 'Python-3.9.7.tgz.1'

100%[=====>] 25,755,357 1.59MB/s in 20s

2023-05-24 02:26:00 (1.22 MB/s) - 'Python-3.9.7.tgz.1' saved [25755357/25755357]

[lusi@localhost ~]$
[lusi@localhost ~]$ ls
cpp-4.8.5-44.el7.x86_64.rpm ksh-20120801-142.el7.aarch64.rpm ksh-20120801-144.el7_9.src.rpm Python-3.9.7.tgz rpmbuild
gcc-4.8.5-44.el7.src.rpm ksh-20120801-142.el7.x86_64.rpm Python-3.9.7 Python-3.9.7.tgz.1

[lusi@localhost ~]$ wget https://www.python.org/ftp/python/3.9.7/Python-3.9.7.tgz
--2023-05-24 02:25:39-- https://www.python.org/ftp/python/3.9.7/Python-3.9.7.tgz
Resolving www.python.org (www.python.org)... 151.101.156.223, 2a04:4e42:25::223
Connecting to www.python.org (www.python.org)|151.101.156.223|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 25755357 (25M) [application/octet-stream]
Saving to: 'Python-3.9.7.tgz.1'

100%[=====>] 25,755,357 1.59MB/s in 20s

2023-05-24 02:26:00 (1.22 MB/s) - 'Python-3.9.7.tgz.1' saved [25755357/25755357]

[lusi@localhost ~]$
```

Extract python

```
[lusi@localhost ~]$ tar -xvf Python-3.9.7.tgz
Python-3.9.7/
Python-3.9.7/Python/
Python-3.9.7/Python/pystrtod.c
Python-3.9.7/Python/importlib.h
Python-3.9.7/Python/Python-ast.c
Python-3.9.7/Python/hamt.c
Python-3.9.7/Python/bltinmodule.c
Python-3.9.7/Python/context.c
Python-3.9.7/Python/future.c
Python-3.9.7/Python/pystrcmp.c
Python-3.9.7/Python/symtable.c
Python-3.9.7/Python/ast_unparse.c
Python-3.9.7/Python/condvar.h
Python-3.9.7/Python/getopt.c
Python-3.9.7/Python/dynload_dli.c
```

Cd python and config the settings

```
[lusi@localhost ~]$ cd Python-3.9.7
[lusi@localhost Python-3.9.7]$ ./configure --enable-optimizations
checking build system type... x86_64-pc-linux-gnu
checking host system type... x86_64-pc-linux-gnu
checking for python3.9... python3.9
checking for --enable-universalsdk... no
checking for --with-universal-archs... no
checking MACHDEP... "linux"
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
```

Make command to install exe file

```
[lusi@localhost ~]$ cd Python-3.9.7
[lusi@localhost Python-3.9.7]$ sudo make install
[sudo] password for lusi:
```

3.Display the python 3 version using command

```
[lusi@localhost ~]$ python3 --version
Python 3.9.7
[lusi@localhost ~]$
```

4.Install any software using rpm

Download the package sing wget command

```
[lusi@localhost ~]$ wget http://mirror.centos.org/centos/7/os/x86_64/Packages/ksh-20120801-142.el7.x86_64.rpm
--2023-05-24 01:59:02-- http://mirror.centos.org/centos/7/os/x86_64/Packages/ksh-20120801-142.el7.x86_64.rpm
Resolving mirror.centos.org (mirror.centos.org)... 45.122.221.183, 2406:da14:d02:6501:83d:3d3c:fc36:b359
Connecting to mirror.centos.org (mirror.centos.org)|45.122.221.183|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 905540 (884K) [application/x-rpm]
Saving to: 'ksh-20120801-142.el7.x86_64.rpm'

100%[=====>] 905,540      196KB/s   in 5.0s

2023-05-24 01:59:11 (175 KB/s) - 'ksh-20120801-142.el7.x86_64.rpm' saved [905540/905540]
```

Install using rpm command

```
[lusi@localhost ~]$ rpm -i ksh-20120801-142.el7.x86_64.rpm
error: can't create transaction lock on /var/lib/rpm/.rpm.lock (Permission denied)
[lusi@localhost ~]$ sudo rpm -i ksh-20120801-142.el7.x86_64.rpm
[sudo] password for lusi:
[lusi@localhost ~]$ ls
cpp-4.8.5-44.el7.x86_64.rpm  ksh-20120801-142.el7.aarch64.rpm  ksh-20120801-144.el7_9.src.rpm  Python-3.9.7.tgz
gcc-4.8.5-44.el7.src.rpm   ksh-20120801-142.el7.x86_64.rpm  Python-3.9.7                  rpmbuild
[lusi@localhost ~]$ sudo rpm -i ksh-20120801-142.el7.x86_64.rpm
package ksh-20120801-142.el7.x86_64 is already installed
[lusi@localhost ~]$
```

5.Uninstall Apache server

```
[lusi@localhost ~]$ sudo yum remove httpd
[sudo] password for lusi:
Loaded plugins: fastestmirror
```

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

Install

```
[lusi@localhost ~]$ rpm -e ksh-20120801-142.el7.x86_64
error: can't create transaction lock on /var/lib/rpm/.rpm.lock (Permission denied)
[lusi@localhost ~]$ sudo rpm -e ksh-20120801-142.el7.x86_64
```

verification

```
[lusi@localhost ~]$ sudo yum list installed ksh-20120801-142.el7.x86_64
loaded plugins: fastestmirror
loading mirror speeds from cached hostfile
* base: bd.mirror.vanehost.com
* extras: bd.mirror.vanehost.com
* updates: mirror-hk.koddos.net
error: No matching Packages to list
[lusi@localhost ~]$
```

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

```
[lusi@localhost ~]$ sudo yum repolist
loaded plugins: fastestmirror
loading mirror speeds from cached hostfile
* base: mirrors.nextgen.com
* extras: mirrors.nextgen.com
* updates: mirrors.nextgen.com
repo id                               repo name                               status
base/7/x86_64                        CentOS-7 - Base                        10,072
extras/7/x86_64                      CentOS-7 - Extras                      515
updates/7/x86_64                    CentOS-7 - Updates                     4,954
repolist: 15,541
[lusi@localhost ~]$
```

```
[lusi@localhost ~]$ sudo yum list installed
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: repo.extreme-ix.org
 * extras: repo.extreme-ix.org
 * updates: repo.extreme-ix.org
Installed Packages
Installed Packages
NetworkManager.x86_64                1:1.18.4-3.el7                @anaconda
NetworkManager-libnm.x86_64         1:1.18.4-3.el7                @anaconda
NetworkManager.x86_64               1:1.18.4-3.el7                @anaconda
NetworkManager-libnm.x86_64         1:1.18.4-3.el7                @anaconda
NetworkManager-team.x86_64          1:1.18.4-3.el7                @anaconda
NetworkManager-tui.x86_64           1:1.18.4-3.el7                @anaconda
acl.x86_64                           2.2.51-15.el7                 @anaconda
apr.x86_64                           1.4.8-7.el7                   @base
apr-util.x86_64                     1.5.2-6.el7                   @base
audit.x86_64                         2.8.5-4.el7                   @anaconda
audit-libs.x86_64                   2.8.5-4.el7                   @anaconda
authconfig.x86_64                   6.2.8-30.el7                  @anaconda
avahi-libs.x86_64                   0.6.31-20.el7                 @anaconda
basesystem.noarch                   10.0-7.el7.centos             @anaconda
bash.x86_64                          4.2.46-34.el7                 @anaconda
bash-completion.noarch              1:2.1-8.el7                   @anaconda
bind-export-libs.x86_64              32:9.11.4-16.P2.el7_8.2       @koji-override-1
binutils.x86_64                     2.27-43.base.el7              @anaconda
biosdevname.x86_64                  0.7.3-2.el7                   @anaconda
btrfs-progs.x86_64                  4.9.1-1.el7                   @anaconda
bzip2.x86_64                         1.0.6-13.el7                  @anaconda
bzip2-libs.x86_64                   1.0.6-13.el7                  @anaconda
ca-certificates.noarch               2019.2.32-76.el7_7            @anaconda
centos-logos.noarch                  70.0.6-3.el7.centos           @base
centos-release.x86_64                7-8.2003.0.el7.centos         @anaconda
chkconfig.x86_64                    1.7.4-1.el7                   @anaconda
chrony.x86_64                        3.4-1.el7                     @anaconda
cifs-utils.x86_64                    6.2-10.el7                    @anaconda
coreutils.x86_64                     8.22-24.el7                   @anaconda
cpio.x86_64                          2.11-27.el7                   @anaconda
cpp.x86_64                           4.8.5-44.el7                  @base
cracklib.x86_64                      2.9.0-11.el7                  @anaconda
```