

## SSH CONFIGURATION

1. Launch two instances by the name of “**exam machine**” and “**dns server**” by creating a new key pair with the name of “**exam\_key**”.

Login into both AWS instances and change the necessary configuration in the ssh configuration file.

Set the root password as “**redhat@123**” and the ec2-user password as “**redhat@321**”.

[ BELOW TASKS WILL BE PERFORMED ON “exam machine” ]

Configure the settings of SSH in such a way that the client system can only connect remotely

by accessing port 2222 of your machine.

Restart the service to initialize changes in the machine.

Save the public IP address of the second machine [ DNS server ] in file named /root/pubip.txt[compulsory].

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
exam machine	i-06b4c8a9e44b5970e	Running	t2.micro	2/2 checks passed	View alarms +	ap-northeast-2a	ec2-52-143-111-143
dns server	i-03044e612360be2ce	Running	t2.micro	2/2 checks passed	View alarms +	ap-northeast-2a	ec2-52-143-111-143

IPv4 ...	Elastic IP	IPv6 IPs	Monitoring	Security group name	Key name	Launch time	Platform
125.79	-	-	disabled	launch-wizard-3	exam_key	2024/06/05 18:32 GMT+5:30	
180.89	-	-	disabled	launch-wizard-3	exam_key	2024/06/05 18:32 GMT+5:30	

**PasswordAuthentication yes**

-- INSERT --

```
#LoginGraceTime 2m
|PermitRootLogin yes
#StrictModes yes
```

```
[root@exam-machine ~]# vim /etc/ssh/sshd_config
[root@exam-machine ~]# vim /etc/ssh/sshd_config
[root@exam-machine ~]# 131L, 3679B written
[root@exam-machine ~]# systemctl restart sshd
[root@exam-machine ~]# passwd root
Changing password for user root.
New password:
BAD PASSWORD: The password fails the dictionary check - it is based on a dictionary word
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# passwd ec2-user
Changing password for user ec2-user.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# |
```

```
x root@ip-172-31-15-137:~ x root@dns-server:~ + - [root@dns-server ~]# vim /etc/ssh/sshd_config [root@dns-server ~]# systemctl restart sshd [root@dns-server ~]# passwd root Changing password for user root. New password: BAD PASSWORD: The password fails the dictionary check - it is based on a dictionary word Retype new password: passwd: all authentication tokens updated successfully. [root@dns-server ~]# passwd ec2-user Changing password for user ec2-user. New password: Retype new password: passwd: all authentication tokens updated successfully. [root@dns-server ~]# |
```

```
#  
Port 2222|  
#AddressFamily any  
#ListenAddress 0.0.0.0  
#ListenAddress ::
```

```
[root@exam-machine ~]# yum install bind bind-utils -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.
```

```
Package           Architecture     Version          Repository      Size
=====
Installing:
bind              x86_64          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   507 k
bind-utils        x86_64          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   212 k
Installing dependencies:
bind-dnssec-doc  noarch          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   49 k
bind-libs         x86_64          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   1.2 M
bind-license      noarch          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   14 k
fstrm             x86_64          0.6.1-3.el9                rhel-9-appstream-rhui-rpms   30 k
libuv             x86_64          1:1.42.0-1.el9               rhel-9-appstream-rhui-rpms   153 k
protobuf-c        x86_64          1.3.3-13.el9               rhel-9-baseos-rhui-rpms    37 k
python3-bind      noarch          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   71 k
python3-ply       noarch          3.11-14.el9                 rhel-9-appstream-rhui-rpms   111 k
Installing weak dependencies:
bind-dnssec-utils x86_64          32:9.16.23-18.el9_4.1    rhel-9-appstream-rhui-rpms   122 k
```



```

root@exam-machine:~/var/nar ~ + - x
[root@exam-machine named]#
[root@exam-machine named]# vim /root/pubip.txt
[root@exam-machine named]# named-checkzone pratu.online /root/pubip.txt
zone pratu.online/IN: loaded serial 0
OK
[root@exam-machine named]# systemctl restart named
[root@exam-machine named]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
   Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: disabled)
     Active: active (running) since Thu 2024-06-06 03:52:48 UTC; 9s ago
       Process: 17317 ExecStartPre=/bin/bash -c if [ ! "$DISABLE_ZONE_CHECKING" == "yes" ]; then /usr/sbin/named-checkzone --no-nsupdate $NAMEDCONF; fi; then /usr/sbin/named -c ${NAMEDCONF} $OPTIONS (code=exited, status=0/SUCCESS)
      Main PID: 17321 (named)
         Tasks: 5 (limit: 4329)
        Memory: 12.3M
          CPU: 57ms
        CGroup: /system.slice/named.service
           └─17321 /usr/sbin/named -c /etc/named.conf

Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './NS/IN': 2001:7fe::53#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './DNSKEY/IN': 2001:7fd::1#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './NS/IN': 2001:7fd::1#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './DNSKEY/IN': 2001:500:2::c#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './NS/IN': 2001:500:2::c#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './DNSKEY/IN': 2001:500:1::53#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './NS/IN': 2001:500:1::53#53
Jun 06 03:52:48 exam-machine.com named[17321]: network unreachable resolving './DNSKEY/IN': 2001:500:9f::42#53

```

```

root@exam-machine:~/var/nar ~ + - x
$TTL 3H
@ IN SOA @ rname.invalid. (
    0 ; serial
    1D ; refresh
    1H ; retry
    1W ; expire
    3H ) ; minimum

@ IN NS pns1.pratu.online.
@ IN NS pns2.pratu.online.
pns1 IN A 15.165.15.119
pns2 IN A 15.165.15.119
@ IN A 15.165.15.119

.
.
.
.
.
.
.
.
.
.
.

"~/pubip.txt" 14L, 531B
14,0-1 All

```

The screenshot shows a domain management interface with the following details:

- Domain:** pratu.online
- Section:** Domains
- Left sidebar:**
  - Domain Overview
  - DNS / Nameservers** (selected)
  - Domain Ownership
- Central area:**
  - Create child nameservers** dialog box is open.
  - Message: "Successfully created child nameserver"
  - Text: "Register new child nameservers under your domain name"
  - Form fields:
    - Child Nameserver 1: pns1, IPv4 address: 15.165.15.119
    - Child Nameserver 2: pns2, IPv4 address: 15.165.15.119
  - Buttons: Save, Remove

## USER ADMINISTRATION

Create 5 users by the name of virat rohit shami pandey respectively. Set their password as north@south.

Configure settings in such a way that Dhoni user should not be able to login in your system,

virat and rohit would be member of group “India”, shami and dhoni are member of group

“Bharat”, pandey will me member of group “team”.

Configure settings in such a way that Members of group “team” should not be able to take remote login on your system.

Password for user shami should be expired on 25<sup>th</sup> December 2023.

Configure settings in such a way that passwords of users further going to be created should be

expire within an year after creation.

Permanently change the settings in such a way that no mail file would be created for further users going to be created.

```
root@ip-172-31-15-174:~# useradd -s /bin/bash rohit
[root@exam-machine ~]# useradd -s /bin/bash dhoni
[root@exam-machine ~]# useradd -s /bin/bash shami
[root@exam-machine ~]# useradd -s /bin/bash pandey
[root@exam-machine ~]# passwd virat
Changing password for user virat.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# passwd rohit
Changing password for user rohit.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# passwd dhoni
Changing password for user dhoni.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# passwd shami
Changing password for user shami.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]# passwd pandey
Changing password for user pandey.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@exam-machine ~]#
```

```
root@ip-172-31-15-174:~# groupadd India
[root@exam-machine ~]# groupadd bharat
[root@exam-machine ~]# groupadd team
[root@exam-machine ~]# usermod -aG India virat
[root@exam-machine ~]# usermod -aG India rohit
[root@exam-machine ~]# usermod -aG Bharat shami
usermod: group 'Bharat' does not exist
[root@exam-machine ~]# usermod -aG bharat shami
[root@exam-machine ~]# usermod -aG bharat dhoni
[root@exam-machine ~]# usermod -aG team pandey
[root@exam-machine ~]# usermod -s /usr/sbin/nologin dhoni
```

DenyGroups team

```
PASS_MAX_DAYS    365  
PASS_MIN_DAYS    0  
PASS_WARN_AGE    7
```

```
[root@exam-machine ~]# vim /etc/ssh/sshd_config  
[root@exam-machine ~]# systemctl restart sshd  
[root@exam-machine ~]# chage -E 2023-12-25 shami  
[root@exam-machine ~]# vim /etc/login.defs
```

```
#MAIL_DIR        /var/spool/mail  
#MAIL_FILE       .mail
```

## PERMISSION

Create Three directories game, cricket, movies respectively in /root. Ownership of game

directory should be held with user virat also Game directory can only be accessible by member of group “india” and no other users apart from dhoni. [ create groups if not present ]Configure settings of the system in such a way that all local users can use systemctl

command as a normal command without any sudo privilege.

Also change the setting of game directory so that group ownership of content created below

game directory should be given to group india.

Virat user will have sudo privilege in the system apart from useradd, usermod, and userdel

command. Also members of group “Bharat” will enjoy sudo privilege.

```
[root@exam-machine ~]# mkdir -p /root/game /root/cricket /root/movies  
[root@exam-machine ~]# chown virat:India /root/game  
[root@exam-machine ~]# chmod 770 /root/game  
[root@exam-machine ~]# chmod g+s /root/game  
[root@exam-machine ~]#
```

```
[root@exam-machine ~]# ls -ld /root/game  
drwxrws---+ 2 virat India 6 Jun 6 03:03 /root/game  
[root@exam-machine ~]# ls -ld /root/cricket  
drwxr-xr-x. 2 root root 6 Jun 6 03:03 /root/cricket  
[root@exam-machine ~]# ls -ld /root/movies  
drwxr-xr-x. 2 root root 6 Jun 6 03:03 /root/movies
```

```
#  
ALL ALL = (ALL) NOPASSWD: /bin/systemctl  
## Same thing without a password  
# %wheel      ALL=(ALL)      NOPASSWD: ALL
```

```
## Read drop-in files from /etc/sudoers.d (the # here does not mean a comment)  
virat ALL=(ALL) NOPASSWD: ALL,!/usr/sbin/useradd,!/usr/sbin/usermod,!/usr/sbin/userdel  
%bharat ALL=(ALL) NOPASSWD: ALL
```

```

pandey@exam-machine:~]# visudo
[root@exam-machine ~]# su - pandey
Last login: Thu Jun  6 03:10:15 UTC 2024 on pts/0
[pandey@exam-machine ~]$ systemctl status sshd
● sshd.service - OpenSSH server daemon
  Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; preset: enabled)
  Active: active (running) since Wed 2024-06-05 16:21:47 UTC; 10h ago
    Docs: man:sshd(8)
          man:sshd_config(5)
  Main PID: 14530 (sshd)
     Tasks: 1 (limit: 4329)
   Memory: 5.0M
      CPU: 1.473s
     CGroup: /system.slice/sshd.service
             └─14530 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

[pandey@exam-machine ~]$ |
```

```

root@exam-machine:~/game ~]# cd /root/game
[root@exam-machine game]# ls
[root@exam-machine game]# mkdir DevOps
[root@exam-machine game]# ls -ld DevOps
drwxr-sr-x. 2 root India 6 Jun  6 03:16 DevOps
[root@exam-machine game]# |
```

```

root@exam-machine:~/game ~]#
[root@exam-machine game]# su - virat
[virat@exam-machine ~]$ systemctl status sshd
● sshd.service - OpenSSH server daemon
  Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; preset: enabled)
  Active: active (running) since Wed 2024-06-05 16:21:47 UTC; 10h ago
    Docs: man:sshd(8)
          man:sshd_config(5)
  Main PID: 14530 (sshd)
     Tasks: 1 (limit: 4329)
   Memory: 7.0M
      CPU: 1.546s
     CGroup: /system.slice/sshd.service
             └─14530 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

[virat@exam-machine ~]$ useradd pratiksha
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
[virat@exam-machine ~]$ su - bharat
su: user bharat does not exist or the user entry does not contain all the required fields
[virat@exam-machine ~]$ logout
[root@exam-machine game]# su - bharat
su: user bharat does not exist or the user entry does not contain all the required fields
[root@exam-machine game]# |
```

## OTHER ADMINISTRATION

You are the linux Administrator of the company. Generate a report which states the condition of all processes. Save it as /root/movies/process.txt.

Run “dd if=/dev/zero of=/dev/null &” command three times on terminal. Set Priority of any one dd command at highest.

Kill all the processes run by dd command by using one command only. Make sure output of this command should not be visible on terminal instead it should be saved in /root/movies/killed.txt .

Generate backup of configuration data of your system in /root/movies/backup directory by using tar with compression method Gzip. [ create backup directory ]

Restore the backup you have created at /usr/configuration directory [ create if not present ]

Generate customised log file by the name of “pressure” under /var/log in such a way that all the logs related to user authentication will be saved here.

```
root@exam-machine:~]# ps aux > /root/movies/process.txt

[1] 17344 dd if=/dev/zero of=/dev/null &
[2] 17353 dd if=/dev/zero of=/dev/null &
[3] 17365 nice -n -20 dd if=/dev/zero of=/dev/null &
[root@exam-machine ~]# pkill -f "dd if=/dev/zero of=/dev/null" > /root/movies/killed.txt
[root@exam-machine ~]# mkdir -p /root/movies/backup
[1]  Terminated          dd if=/dev/zero of=/dev/null
[2]-  Terminated          dd if=/dev/zero of=/dev/null
[3]+  Terminated          nice -n -20 dd if=/dev/zero of=/dev/null
[root@exam-machine ~]# tar -czvf /root/movies/backup/config_backup.tar.gz /etc
tar: Removing leading '/' from member names
/etc/
/etc/oddjob/
/etc/sasl2/
/etc/fwupd/
/etc/fwupd/daemon.conf
/etc/fwupd/msr.conf
/etc/fwupd/redfish.conf
/etc/fwupd/thunderbolt.conf
/etc/fwupd/uefi_capsule.conf
/etc/fwupd/bios-settings.d/
/etc/fwupd/bios-settings.d/README.md
/etc/fwupd/remotes.d/
/etc/fwupd/remotes.d/dell-esrt.conf
/etc/fwupd/remotes.d/lvfs-testing.conf

[1] 17344 dd if=/dev/zero of=/dev/null &
[2] 17353 dd if=/dev/zero of=/dev/null &
[3] 17365 nice -n -20 dd if=/dev/zero of=/dev/null &
[root@exam-machine ~]# ls
cricket game movies pubip.txt
[root@exam-machine ~]# cd /root/movies/backup/
[root@exam-machine backup]# ls
config_backup.tar.gz
[root@exam-machine backup]# |
```

```
[root@exam-machine:~]# mkdir -p /usr/configuration
[root@exam-machine ~]# tar -xvf /root/movies/backup/config_backup.tar.gz -C /usr/configuration
etc/
etc/oddjob/
etc/sasl2/
etc/fwupd/
etc/fwupd/daemon.conf
etc/fwupd/msr.conf
etc/fwupd/redfish.conf
etc/fwupd/thunderbolt.conf
etc/fwupd/uefi_capsule.conf
etc/fwupd/bios-settings.d/
etc/fwupd/bios-settings.d/README.md
etc/fwupd/remotes.d/
etc/fwupd/remotes.d/dell-esxt.conf
etc/fwupd/remotes.d/lvfs-testing.conf
etc/fwupd/remotes.d/lvfs.conf
etc/fwupd/remotes.d/vendor-directory.conf
etc/fwupd/remotes.d/vendor.conf
etc/libverbs.d/
etc/libverbs.d/bnxt_re.driver
etc/libverbs.d/cxgb4.driver
etc/libverbs.d/efa.driver
etc/libverbs.d/hfileverbs.driver
etc/libverbs.d/hns.driver
etc/libverbs.d/irdma.driver
etc/libverbs.d/mana.driver
etc/libverbs.d/mlx4.driver
etc/libverbs.d/mlx5.driver
```

```
[root@exam-machine:~]# grep -i "authentication" /var/log/secure > /var/log/pressure.log
[root@exam-machine ~]# cat /var/log/pressure.log
Jun  6 03:10:23 ip-172-31-15-174 polkitd[953]: Registered Authentication Agent for unix-process:16438:3983078 (system bus name :1.201
[ /usr/bin/polkitagent --notify-fd 5 --fallback], object path /org/freedesktop/PolicyKit1/AuthenticationAgent, locale en_US.UTF-8)
Jun  6 03:10:48 ip-172-31-15-174 polkitd[953]: Unregistered Authentication Agent for unix-process:16438:3983078 (system bus name :1.201, object path /org/freedesktop/PolicyKit1/AuthenticationAgent, locale en_US.UTF-8) (disconnected from bus)
[root@exam-machine ~]#
```

```
[root@exam-machine:~]# cat /root/movies/process.txt
USER      PID %CPU %MEM   VSZ   RSS TTY      STAT START   TIME COMMAND
root      1 0.1 2.2 106500 17780 ?        Ss  06:11 0:01 /usr/lib/systemd/systemd --switched-root --system --deserialize 31
root      2 0.0 0.0    0  0 ?        S   06:11 0:00 [kthread]
root      3 0.0 0.0    0  0 ?        I<  06:11 0:00 [rcu_gp]
root      4 0.0 0.0    0  0 ?        I<  06:11 0:00 [rcu_par_gp]
root      5 0.0 0.0    0  0 ?        I<  06:11 0:00 [slub_flushhw]
root      6 0.0 0.0    0  0 ?        I<  06:11 0:00 [netns]
root      7 0.0 0.0    0  0 ?        I   06:11 0:00 [kworker/0:0-events]
root      8 0.0 0.0    0  0 ?        I<  06:11 0:00 [kworker/0:0H-events_highpri]
root      9 0.0 0.0    0  0 ?        I   06:11 0:00 [kworker/u30:0-events_unbound]
root     10 0.0 0.0    0  0 ?        I<  06:11 0:00 [mpercpu_wq]
root     12 0.0 0.0    0  0 ?        I   06:11 0:00 [rcu_tasks_kthre]
root     13 0.0 0.0    0  0 ?        I   06:11 0:00 [rcu_tasks_rude_]
root     14 0.0 0.0    0  0 ?        I   06:11 0:00 [rcu_tasks_trace]
root     15 0.0 0.0    0  0 ?        S   06:11 0:00 [kswapd0/0]
root     16 0.1 0.0    0  0 ?        S   06:11 0:00 [ksoftirqd/0]
root     17 0.2 0.0    0  0 ?        S   06:11 0:02 [pvttys0]
root     18 0.0 0.0    0  0 ?        I   06:11 0:00 [rcu_preempt]
root     19 0.0 0.0    0  0 ?        S   06:11 0:00 [migration/0]
root     20 0.0 0.0    0  0 ?        S   06:11 0:00 [idle_inject/0]
root     22 0.0 0.0    0  0 ?        S   06:11 0:00 [cpuhp/0]
root     24 0.0 0.0    0  0 ?        S   06:11 0:00 [kdevtmpfs]
root     25 0.0 0.0    0  0 ?        I<  06:11 0:00 [inet_frag_wq]
root     26 0.0 0.0    0  0 ?        S   06:11 0:00 [kaudittd]
root     27 0.0 0.0    0  0 ?        S   06:11 0:00 [khungtaskd]
root     29 0.0 0.0    0  0 ?        S   06:11 0:00 [oom_reaper]
root     30 0.0 0.0    0  0 ?        I<  06:11 0:00 [writeback]
root     31 0.0 0.0    0  0 ?        S   06:11 0:00 [kcompactd0]
root     32 0.0 0.0    0  0 ?        SN  06:11 0:00 [kmsd]
root     33 0.0 0.0    0  0 ?        SN  06:11 0:00 [kmsd_paged]
root     34 0.0 0.0    0  0 ?        I<  06:11 0:00 [cryptid]
root     35 0.0 0.0    0  0 ?        I<  06:11 0:00 [kintegrityd]
root     36 0.0 0.0    0  0 ?        I<  06:11 0:00 [kblockd]
root     37 0.0 0.0    0  0 ?        I<  06:11 0:00 [blkcg_punt_bio]
root     38 0.0 0.0    0  0 ?        I<  06:11 0:00 [tpm_dev_wq]
root     39 0.0 0.0    0  0 ?        I<  06:11 0:00 [md]
root     40 0.0 0.0    0  0 ?        I<  06:11 0:00 [edac-poller]
root     41 0.0 0.0    0  0 ?        S   06:11 0:00 [watchdogd]
root     42 0.0 0.0    0  0 ?        I<  06:11 0:00 [kworker/0:1H-kblockd]
root     43 0.0 0.0    0  0 ?        S   06:11 0:00 [kswapd0]
```

```
[root@exam-machine:~]# cat /root/movies/killed.txt
[root@exam-machine ~]# tail /var/log/pressure
Jun  6 06:25:41 exam-machine sudo[1527]:  root : TTY=pts/0 ; PWD=/root ; USER=root ; COMMAND=/bin/systemctl restart rsyslog
Jun  6 06:25:41 exam-machine sudo[1527]: pam_unix(sudo:session): session opened for user root(uid=0) by ec2-user(uid=0)
Jun  6 06:25:41 exam-machine sudo[1527]: pam_unix(sudo:session): session closed for user root
[root@exam-machine ~]#
```

# STORAGE MANAGEMENT

Attach additional hard disk with the size of 2 GB to the instance and create 6 partitions by

using fdisk command. Size would be 500M 250M 250M 400M 400M 200M respectively.

Partition 1 should be used as swap partition of your system.

Partition 2, 3 and 4 should be initialise as physical volume in order to create volume groups.

Create volume group “VG1” with a size of 400M and volume group “VG2” with a size of 300M.

but the extents size of “VG2” should be 8Mib.

Create Logical volume “LV1” with a size of 50 extents. It should be created from “VG1”.

Add xfs file system to “LV1” and mount it to /prod [ create mount point if not present ]

Create another Logical volume “LV2” with a size of 150M. it should be created form “VG1”

Add ext4 file system to “LV2” and mount it to /test [ create mount point ]

Extend “LV1” upto the size of 400M. if sufficient size is not available extend volume group

“VG1” by adding physical volume 4 in “VG1”. Also extend file system by using suitable command.

```
[root@exam-machine ~]# lsblk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda    202:0    0   10G  0 disk
└─xvda1 202:1    0   1M  0 part
  └─xvda2 202:2    0  200M 0 part /boot/efi
  └─xvda3 202:3    0  600M 0 part /boot
  └─xvda4 202:4    0  9.2G 0 part /
[root@exam-machine ~]# lsblk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda    202:0    0   10G  0 disk
└─xvda1 202:1    0   1M  0 part
  └─xvda2 202:2    0  200M 0 part /boot/efi
  └─xvda3 202:3    0  600M 0 part /boot
  └─xvda4 202:4    0  9.2G 0 part /
  └─kvdb 202:16   0   2G  0 disk
[root@exam-machine ~]#
```

```
[root@exam-machine ~]#
[root@exam-machine ~]# fdisk /dev/xvdb
Welcome to fdisk (util-linux 2.37.4).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table.
Created a new DOS disklabel with disk identifier 0x6134fd96.

Command (m for help): g
Created a new GPT disklabel (GUID: 4961F0D1-2DFF-84DF-5C5B557426C7).

Command (m for help): n
Partition number (1-128, default 1): 1
First sector (2048-4194270, default 2048):
Last sector, +/sectors or +/-size{K,M,G,T,P} (2048-4194270, default 4194270): +500M

Created a new partition 1 of type 'Linux filesystem' and of size 500 MiB.

Command (m for help): n
Partition number (2-128, default 2): 2
First sector (1026048-4194270, default 1026048):
Last sector, +/sectors or +/-size{K,M,G,T,P} (1026048-4194270, default 4194270): +250M

Created a new partition 2 of type 'Linux filesystem' and of size 250 MiB.

Command (m for help): n
Partition number (3-128, default 3): 3
First sector (1538048-4194270, default 1538048):
Last sector, +/sectors or +/-size{K,M,G,T,P} (1538048-4194270, default 4194270): +250M

Created a new partition 3 of type 'Linux filesystem' and of size 250 MiB.

Command (m for help): n
Partition number (4-128, default 4): 4
First sector (2050048-4194270, default 2050048): +100M
```

```
root@exam-machine:~ + - ○
Created a new partition 4 of type 'Linux filesystem' and of size 400 MiB.

Command (m for help): n
Partition number (5-128, default 5): 5
First sector (2869248-4194270, default 2869248):
Last sector, +/-sectors or +/-size{K,M,G,T,P} (2869248-4194270, default 4194270): +400M

Created a new partition 5 of type 'Linux filesystem' and of size 400 MiB.

Command (m for help): n
Partition number (6-128, default 6):
First sector (3688448-4194270, default 3688448):
Last sector, +/-sectors or +/-size{K,M,G,T,P} (3688448-4194270, default 4194270): +200M

Created a new partition 6 of type 'Linux filesystem' and of size 200 MiB.

Command (m for help): p
Disk /dev/xvdb: 2 GiB, 2147483648 bytes, 4194304 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (Logical/Physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 4961F0D1-2DF-8649-B4DF-5C5B557426C7

Device      Start    End Sectors  Size Type
/dev/xvdb1   2008 1026008  500M Linux filesystem
/dev/xvdb2 1026008 1538007  512000 250M Linux filesystem
/dev/xvdb3 1538008 2050007  512000 250M Linux filesystem
/dev/xvdb4 2050008 2869248  819200 400M Linux filesystem
/dev/xvdb5 2869248 3688448  819200 400M Linux filesystem
/dev/xvdb6 3688448 4098047  409600 200M Linux filesystem

Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.

[root@exam-machine ~]#
```

```
root@exam-machine:~ + - ○
[root@exam-machine ~]# mkswap /dev/xvdb1
Setting up swapspace version 1, size = 500 MiB (524283904 bytes)
no label, UUID=9f61b1d4-fba2-4957-alaf-07593c61ee7a
[root@exam-machine ~]# blkid /dev/xvdb1
/dev/xvdb1: UUID="9f61b1d4-fba2-4957-alaf-07593c61ee7a" TYPE="swap" PARTUUID="addcf488-b952-c241-bb51-8add4adbbe5c"
[root@exam-machine ~]# vim /etc/fstab
[root@exam-machine ~]# mount -a
[root@exam-machine ~]# swapon -a
[root@exam-machine ~]# free -h
              total        used        free      buff/cache    available
Mem:       753Mi       266Mi       383Mi       5.0Mi       224Mi       493Mi
Swap:      499Mi          0B       499Mi
[root@exam-machine ~]# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda 202:0 0 10G 0 disk
└─xvda1 202:1 0 1M 0 part
  └─xvda2 202:2 0 200M 0 part /boot/efi
  └─xvda3 202:3 0 600M 0 part /boot
  └─xvda4 202:4 0 9.2G 0 part /
xvdb 202:16 0 2G 0 disk
└─xvdb1 202:17 0 500M 0 part [SWAP]
  └─xvdb2 202:18 0 250M 0 part
  └─xvdb3 202:19 0 250M 0 part
  └─xvdb4 202:20 0 400M 0 part
  └─xvdb5 202:21 0 400M 0 part
  └─xvdb6 202:22 0 200M 0 part
[root@exam-machine ~]#
```

```
root@exam-machine:~ + - ○
[root@exam-machine ~]# yum install lvm2 -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 3:05:21 ago on Thu 06 Jun 2024 03:44:48 AM UTC.
Dependencies resolved.
=====
 Package           Architecture     Version          Repository      Size
=====
Installing:
 lvm2             x86_64          9:2.03.23-2.el9    rhel-9-baseos-rhui-rpms 1.5 M
Upgrading:
 device-mapper     x86_64          9:1.02.197-2.el9   rhel-9-baseos-rhui-rpms 145 k
 device-mapper-libs x86_64          9:1.02.197-2.el9   rhel-9-baseos-rhui-rpms 180 k
Installing dependencies:
 device-mapper-event x86_64          9:1.02.197-2.el9   rhel-9-baseos-rhui-rpms 36 k
 device-mapper-event-libs x86_64        9:1.02.197-2.el9   rhel-9-baseos-rhui-rpms 34 k
 device-mapper-persistent-data x86_64        1.0.9-3.el9_4    rhel-9-baseos-rhui-rpms 1.0 M
 libaio            x86_64          0.3.111-13.el9    rhel-9-baseos-rhui-rpms 26 k
 lvm2-libs         x86_64          9:2.03.23-2.el9    rhel-9-baseos-rhui-rpms 1.0 M
=====
Transaction Summary
=====
Install 6 Packages
Upgrade 2 Packages

Total download size: 3.9 M
Downloading Packages:
(1/8): libaio-0.3.111-13.el9.x86_64.rpm                                403 kB/s | 26 kB   00:00
(2/8): device-mapper-event-1.02.197-2.el9.x86_64.rpm                      515 kB/s | 36 kB   00:00
(3/8): device-mapper-event-libs-1.02.197-2.el9.x86_64.rpm                  448 kB/s | 34 kB   00:00
```

```
[root@exam-machine ~]# pvcreate /dev/xvdb2 /dev/xvdb3 /dev/xvdb4
  Physical volume "/dev/xvdb2" successfully created.
  Physical volume "/dev/xvdb3" successfully created.
  Physical volume "/dev/xvdb4" successfully created.
  Creating devices file /etc/lvm/devices/system_devices
[root@exam-machine ~]# vgcreate VG1 /dev/xvdb2 /dev/xvdb3 /dev/xvdb4
  Volume group "VG1" successfully created
[root@exam-machine ~]# vgcreate -s 8M VG2 /dev/xvdb5 /dev/xvdb6
  Physical volume "/dev/xvdb5" successfully created.
  Physical volume "/dev/xvdb6" successfully created.
  Volume group "VG2" successfully created
[root@exam-machine ~]# lvcreate -l 50 -n LV1 VG1
  Logical volume "LV1" created.
[root@exam-machine ~]# lvcreate -L 150M -n LV2 VG1
  Rounding up size to full physical extent 152.00 MiB
  Logical volume "LV2" created.
[root@exam-machine ~]# mkfs.xfs /dev/VG1/LV1
Filesystem should be larger than 300MB.
Log size should be at least 64MB.
Support for filesystems like this one is deprecated and they will not be supported in future releases.
meta-data=/dev/VG1/LV1      isize=512    agcount=4, agsize=12800 blks
                          =         sectsz=512   attr=2, projid32bit=1
                          =         crc=1     finobt=1, sparse=1, rmapbt=0
data        =         bsize=4096   blocks=51200, imaxpct=25
                          =         sunit=0    swidth=0 blks
naming      =version 2      bsize=4096
log         =internal log   bsize=4096   blocks=1368, version=2
                          =         sectsz=512   sunit=0 blks, lazy-count=1
realtime    =none           extsz=4096
[root@exam-machine ~]#
```

```
[root@exam-machine ~]# mkfs.ext4 /dev/VG1/LV2
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 155648 1k blocks and 38912 inodes
Filesystem UUID: 775a45bb-d1e8-4e5d-b494-173413e78260
Superblock backups stored on blocks:
    8193, 24577, 40961, 57345, 73729

Allocating group tables: done
Writing inode tables: done
Creating journal (4096 blocks): done
Writing superblocks and filesystem accounting information: done

[root@exam-machine ~]# mkdir -p /prod /test
[root@exam-machine ~]# mount /dev/VG1/LV1 /prod
[root@exam-machine ~]# mount /dev/VG1/LV2 /test
[root@exam-machine ~]# lvextend -L +600M /dev/VG1/LV1
  Size of logical volume VG1/LV1 changed from 200.00 MiB (50 extents) to 600.00 MiB (150 extents).
  Logical volume VG1/LV1 successfully resized.
[root@exam-machine ~]# sudo xfs_growfs /prod
meta-data=/dev/mapper/VG1-LV1      isize=512    agcount=4, agsize=12800 blks
                          =         sectsz=512   attr=2, projid32bit=1
                          =         crc=1     finobt=1, sparse=1, rmapbt=0
data        =         bsize=4096   blocks=51200, imaxpct=25
                          =         sunit=0    swidth=0 blks
naming      =version 2      bsize=4096
log         =internal log   bsize=4096   blocks=1368, version=2
                          =         sectsz=512   sunit=0 blks, lazy-count=1
realtime    =none           extsz=4096
data blocks changed from 51200 to 153600
[root@exam-machine ~]#
```

```
[root@exam-machine ~]# lsblk
NAME      MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda      202:0    0   10G  0 disk 
└─xvda1    202:1    0   1M  0 part 
└─xvda2    202:2    0  200M 0 part /boot/efi
└─xvda3    202:3    0  600M 0 part /boot
└─xvda4    202:4    0   9.2G 0 part /
xvdb      202:16   0   2G  0 disk 
└─xvdb1    202:17   0   500M 0 part [SWAP]
└─xvdb2    202:18   0   250M 0 part 
  └─VG1-LV1 253:0   0   600M 0 lvm  /prod
└─xvdb3    202:19   0   250M 0 part 
  └─VG1-LV2 253:1   0   152M 0 lvm  /test
└─xvdb4    202:20   0   400M 0 part 
  └─VG1-LV1 253:0   0   600M 0 lvm  /prod
└─xvdb5    202:21   0   400M 0 part 
└─xvdb6    202:22   0   200M 0 part
[root@exam-machine ~]#
```

# NFS SERVERS

Configure your current machine as NFS client and configure second machine [ “dns server” ]

as NFS server. The directory going to be shared will be named as **/Exams**. And this directory

can be accessible by NFS clients with the name of **/paper**. Make sure the root user can make

```
[root@nfs-server ~]# [root@nfs-server ~]# yum install nfs* -y  
Updating Subscription Management repositories.  
Unable to read consumer identity  
  
This system is not registered with an entitlement server. You can use subscription-manager to register.
```

Package	Architecture	Version	Repository	Size
<hr/>				
Installing:				
<code>nfs-utils</code>	x86_64	1:2.5.4-25.el9	rhel-9-baseos-rhui-rpms	463 k
<code>nfs-utils-coreos</code>	x86_64	1:2.5.4-25.el9	rhel-9-appstream-rhui-rpms	195 k
<code>nfs4-acl-tools</code>	x86_64	0.4.2-3.el9	rhel-9-baseos-rhui-rpms	54 k
<code>nfsv4-client-utils</code>	x86_64	1:2.5.4-25.el9	rhel-9-appstream-rhui-rpms	160 k
Upgrading:				
<code>device-mapper</code>	x86_64	9:1.02.197-2.el9	rhel-9-baseos-rhui-rpms	145 k
<code>device-mapper-libs</code>	x86_64	9:1.02.197-2.el9	rhel-9-baseos-rhui-rpms	180 k
Installing dependencies:				
<code>gssproxy</code>	x86_64	0.8.4-6.el9	rhel-9-baseos-rhui-rpms	114 k
<code>keyutils</code>	x86_64	1.6.3-1.el9	rhel-9-baseos-rhui-rpms	78 k
<code>libev</code>	x86_64	4.33-5.el9	rhel-9-baseos-rhui-rpms	56 k
<code>libnfsmount</code>	x86_64	1:2.5.4-25.el9	rhel-9-baseos-rhui-rpms	66 k
<code>libtirpc</code>	x86_64	1.3.3-8.el9_4	rhel-9-baseos-rhui-rpms	96 k
<code>libverto-libev</code>	x86_64	0.3.2-3.el9	rhel-9-baseos-rhui-rpms	15 k

```
[root@dns-server ~]# mkdir /Exams
[root@dns-server ~]# cd /
[root@dns-server ~]# ls
afs boot efi Exams lib media opt root sbin sys usr
bin dev etc home lib64 mnt proc run srv tmp var
[root@dns-server ~]# semanage fcontext -a -t nfs_t /Exams
[root@dns-server ~]# ls -ldz /Exams
drwxr-xr-x. 2 root root unconfined_u:object_r:default_t:s0 6 Jun  6 10:09 /Exams
[root@dns-server ~]# restorecon -vVRF /Exams
Relabeled '/Exams' from unconfined_u:object_r:default_t:s0 to system_u:object_r:nfs_t:s0
[root@dns-server ~]# ls -ldz /Exams
drwxr-xr-x. 2 root root system_u:object_r:nfs_t:s0 6 Jun  6 10:09 /Exams
[root@dns-server ~]# vim /etc/exports
[root@dns-server ~]# systemctl restart nfs-server
[root@dns-server ~]# exportfs -v
/Exams          <rw,(sync,wdelay,hide,no_subtree_check,sec=sys,rw,secure,no_root_squash,no_all_squash)
[root@dns-server ~]#
```

```
root@dns-server:/          x  root@exam-machine:~  x  +  v
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
::1          localhost localhost.localdomain localhost6 localhost6.localdomain6
52.79.253.207  servera
```

-- INSERT -- 3, 22-24 All

```
root@dns-server:/          root@exam-machine:~      +  ~  
UUID=497ad222-04fa-453f-b110-ba001d38788   /      xfs    defaults      0      0  
UUID=2e0d9ec9-a82a-43cc-a8e2-c6db30e7f6a4   /boot  xfs    defaults      0      0  
UUID=7877-95E7  /boot/efi  vfat   defaults,uid=0,gid=0,umask=077,shortname=winnt  0      2  
UUID=6913077b-2f47-40ad-b533-5198933bf06   none   swap   defaults      0      0  
servera:/Exams /paper  nfs    defaults      0      0
```

-- INSERT -- 5,39-58 All

```
root@dns-server:/ ~]# mkdir /paper
[root@dns-client ~]# vim /etc/fstab
[root@dns-client ~]# mount -a
mount: (hint) your fstab has been modified, but systemd still uses
      the old version; use 'systemctl daemon-reload' to reload.
[root@dns-client ~]# systemctl daemon-reload
[root@dns-client ~]# df -h
Filesystem      Size   Used  Avail Use% Mounted on
devtmpfs        4.0M     0  4.0M  0% /dev
tmpfs          377M     0  377M  0% /dev/shm
tmpfs          151M  4.4M  147M  3% /run
/dev/xvda4       9.2G  1.5G  7.7G 16% /
/dev/xvda3      536M  161M  376M 31% /boot
/dev/xvda2      200M   7.0M  193M  4% /boot/efi
tmpfs           76M     0   76M  0% /run/user/1000
servera:/Exams  9.2G  1.5G  7.8G 16% /paper
[root@dns-client ~]# cd /paper
[root@dns-client paper]# ls
[root@dns-client paper]# touch pratiksha.txt
[root@dns-client paper]# ls
pratiksha.txt
[root@dns-client paper]# |
```

```
root@dns-server:/Exams ~]# cd /Exams
[root@dns-server Exams]# ls
pratiksha.txt
[root@dns-server Exams]# |
```

## WEBSERVER AND DNS SERVER

Configure second instance [ “DNS server” ] as DNS server by using package named bind.

Mentions two subdomains while mapping IP’s i.e., aarambh and job with your domain. These

two sub domains will also be mapped with the same IP from which main website is mapped.

Configure the current machine [ exam machine ] as a web server by using Apache httpd.

Configure name-based virtual hosting on the current machine by creating subdomains of your

domain name by the name of **aarambh.yourdomain** and **job.yourdomain** .

Document root for aarambh.yourdomain would be /var/www/aarambh and for job.yourdomain would be /var/www/job.

Content should be visible on your main domain will be downloaded as zip from <https://www.free-css.com/assets/files/free-css-templates/download/page296/healet.zip>.

Content should be visible on aarambh.yourdomain will be downloaded as zip from <https://www.free-css.com/assets/files/free-css-templates/download/page296/littlefashion.zip>.

Content should be visible on job.yourdomain will be downloaded as zip from <https://www.free-css.com/assets/files/free-css-templates/download/page296/finexo.zip>

```
[root@dns-server ~]# yum install bind bind-utils -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:16:25 ago on Thu 06 Jun 2024 10:14:04 AM UTC.
Dependencies resolved.
=====
Package           Architecture Version      Repository    Size
=====
Installing:
bind              x86_64      32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 507 k
bind-utils        x86_64      32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 212 k
Installing dependencies:
bind-dnssec-doc  noarch     32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 49 k
bind-libs         x86_64      32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 1.2 M
bind-license      noarch     32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 14 k
fstrm             x86_64      0.6.1-3.el9          rhel-9-appstream-rhui-rpms 30 k
libuv             x86_64      1:1.42.0-1.el9        rhel-9-appstream-rhui-rpms 153 k
protobuf-c        x86_64      1.3.3-13.el9        rhel-9-baseos-rhui-rpms 37 k
python3-bind      noarch     32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 71 k
python3-ply       noarch     3.11-14.el9          rhel-9-appstream-rhui-rpms 111 k
Installing weak dependencies:
bind-dnssec-utils x86_64      32:9.16.23-18.el9_4.1   rhel-9-appstream-rhui-rpms 122 k
Transaction Summary
```

```
[root@dns-server ~]# systemctl enable named
Created symlink /etc/systemd/system/multi-user.target.wants/named.service → /usr/lib/systemd/system/named.service.
[root@dns-server ~]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
  Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: disabled)
  Active: inactive (dead)
[root@dns-server ~]# systemctl start named
[root@dns-server ~]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
  Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: disabled)
  Active: active (running) since Thu 2024-06-06 10:31:45 UTC; 2s ago
    Process: 2934 ExecStartPre=/bin/bash -c if [ ! "$DISABLE_ZONE_CHECKING" == "yes" ]; then /usr/sbin/named-checkconf &
    Process: 2936 ExecStart=/usr/sbin/named -u named -c ${NAMEDCONF} $OPTIONS (code=exited, status=0/SUCCESS)
   Main PID: 2937 (named)
      Tasks: 5 (limit: 4329)
     Memory: 23.9M
        CPU: 74ms
       CGroup: /system.slice/named.service
               └─2937 /usr/sbin/named -u named -c /etc/named.conf

Jun 06 10:31:45 dns-server.com named[2937]: network unreachable resolving './DNSKEY/IN': 2001:dc3::35#53
Jun 06 10:31:45 dns-server.com named[2937]: network unreachable resolving './NS/IN': 2001:dc3::35#53
Jun 06 10:31:45 dns-server.com named[2937]: zone 1.0.0.127.in-addr.arpa/IN: loaded serial 0
Jun 06 10:31:45 dns-server.com named[2937]: zone localhost/IN: loaded serial 0
Jun 06 10:31:45 dns-server.com named[2937]: zone localhost.localdomain/IN: loaded serial 0
Jun 06 10:31:45 dns-server.com named[2937]: all zones loaded
Jun 06 10:31:45 dns-server.com systemd[1]: Started Berkeley Internet Name Domain (DNS).
```

```
root@dns-server:~ x + v
[root@pratiksha ~]#
[root@pratiksha ~]# yum install httpd -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Red Hat Enterprise Linux 9 for x86_64 - AppStream from RHUI (RPMS)          73 kB/s | 4.5 kB    00:00
Red Hat Enterprise Linux 9 for x86_64 - BaseOS from RHUI (RPMS)            67 kB/s | 4.1 kB    00:00
Red Hat Enterprise Linux 9 Client Configuration                         28 kB/s | 1.5 kB    00:00
Dependencies resolved.
=====
Package           Architecture Version      Repository    Size
=====
Installing:
httpd             x86_64      2.4.57-8.el9          rhel-9-appstream-rhui-rpms 52 k
Installing dependencies:
apr               x86_64      1.7.0-12.el9_3        rhel-9-appstream-rhui-rpms 126 k
apr-util          x86_64      1.6.1-23.el9          rhel-9-appstream-rhui-rpms 97 k
apr-util-bdb      x86_64      1.6.1-23.el9          rhel-9-appstream-rhui-rpms 14 k
httpd-core        x86_64      2.4.57-8.el9          rhel-9-appstream-rhui-rpms 1.5 M
httpd-filesystem  noarch     2.4.57-8.el9          rhel-9-appstream-rhui-rpms 15 k
httpd-tools        x86_64      2.4.57-8.el9          rhel-9-appstream-rhui-rpms 87 k
mailcap           noarch     2.1.49-5.el9          rhel-9-baseos-rhui-rpms 35 k
redhat-logos-httpd noarch     90.4-2.el9          rhel-9-appstream-rhui-rpms 18 k
Installing weak dependencies:
apr-util-openssl  x86_64      1.6.1-23.el9          rhel-9-appstream-rhui-rpms 17 k
```

```
[root@pratiksha ~]# yum install wget unzip -y
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:01:31 ago on Thu 06 Jun 2024 12:24:25 PM UTC.
Dependencies resolved.
=====
Package           Architecture      Version       Repository      Size
=====
Installing:
unzip            x86_64          6.0-56.el9    rhel-9-baseos-rhui-rpms 186 k
wget             x86_64          1.21.1-7.el9  rhel-9-appstream-rhui-rpms 794 k

Transaction Summary
=====
Install 2 Packages

Total download size: 980 k
Installed size: 3.5 M
Downloading Packages:
(1/2): unzip-6.0-56.el9.x86_64.rpm           3.5 MB/s | 186 kB   00:00
(2/2): wget-1.21.1-7.el9.x86_64.rpm         11 MB/s | 794 kB   00:00

Total                                         7.7 MB/s | 980 kB   00:00

Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
```

```
[root@pratiksha ~]# systemctl start httpd
[root@pratiksha ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: active (running) since Thu 2024-06-06 12:26:19 UTC; 7s ago
       Docs: man:httpd.service(8)
 Main PID: 15375 (httpd)
   Status: "Started, listening on: port 80"
     Tasks: 177 (limit: 4329)
    Memory: 28.5M
      CPU: 77ms
     CGroup: /system.slice/httpd.service
             ├─15375 /usr/sbin/httpd -DFOREGROUND
             ├─15376 /usr/sbin/httpd -DFOREGROUND
             ├─15377 /usr/sbin/httpd -DFOREGROUND
             ├─15378 /usr/sbin/httpd -DFOREGROUND
             └─15379 /usr/sbin/httpd -DFOREGROUND

Jun 06 12:26:18 pratiksha.com systemd[1]: Starting The Apache HTTP Server...
Jun 06 12:26:19 pratiksha.com systemd[1]: Started The Apache HTTP Server.
Jun 06 12:26:19 pratiksha.com httpd[15375]: Server configured, listening on: port 80
[root@pratiksha ~]# |
```

```
[root@pratiksha:var/www/ht]# wget https://www.free-css.com/assets/files/free-css-templates/download/page296/healet.zip.
--2024-06-06 12:44:04-- https://www.free-css.com/assets/files/free-css-templates/download/page296/healet.zip.
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:f000::28f
Connecting to www.free-css.com (www.free-css.com)|217.160.0.242|:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://www.free-css.com/assets/files/free-css-templates/download/page296/healet.zip [following]
--2024-06-06 12:44:05-- https://www.free-css.com/assets/files/free-css-templates/download/page296/healet.zip
Reusing existing connection to www.free-css.com:443.
HTTP request sent, awaiting response... 200 OK
Length: 2040237 (1.9M) [application/zip]
Saving to: 'healet.zip'.
```

healet.zip. 100%[=====] 1.95M 896KB/s in 2.2s

2024-06-06 12:44:08 (896 KB/s) - 'healet.zip.' saved [2040237/2040237]

```
[root@pratiksha html]# ls
healet.zip.
[root@pratiksha html]# unzip healet.zip.
Archive: healet.zip.
  creating: healet-html/
  inflating: healet-html/about.html
  inflating: healet-html/blog.html
  creating: healet-html/css/
  inflating: healet-html/css/bootstrap.css
  inflating: healet-html/css/font-awesome.min.css
  inflating: healet-html/css/responsive.css
  inflating: healet-html/css/style.css
  inflating: healet-html/css/style.css.map
  inflating: healet-html/css/style.scss
  creating: healet-html/fonts/
  inflating: healet-html/fonts/fontawesome-webfont.ttf
  inflating: healet-html/fonts/fontawesome-webfont.woff
```

```
[root@pratiksha:var/www/aa]# wget https://www.free-css.com/assets/files/free-css-templates/download/page296/little-fashion.zip
--2024-06-06 12:48:47-- https://www.free-css.com/assets/files/free-css-templates/download/page296/little-fashion.zip
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:f000::28f
Connecting to www.free-css.com (www.free-css.com)|217.160.0.242|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1596631 (1.5M) [application/zip]
Saving to: 'little-fashion.zip'.
```

little-fashion.zip. 100%[=====] 1.52M 637KB/s in 2.4s

2024-06-06 12:48:50 (637 KB/s) - 'little-fashion.zip' saved [1596631/1596631]

```
[root@pratiksha aarambh]# ls
little-fashion.zip
[root@pratiksha aarambh]# unzip little-fashion.zip.
Archive: little-fashion.zip
  creating: 2127.little_fashion/
  inflating: 2127.little_fashion/about.html
  inflating: 2127.little_fashion/contact.html
  creating: 2127.little_fashion/css/
  inflating: 2127.little_fashion/css/bootstrap-icons.css
  inflating: 2127.little_fashion/css/bootstrap.min.css
  inflating: 2127.little_fashion/css/slick.css
  inflating: 2127.little_fashion/css/tooplate-little-fashion.css
  inflating: 2127.little_fashion/faq.html
  creating: 2127.little_fashion/fonts/
  inflating: 2127.little_fashion/fonts/bootstrap-icons.woff
  inflating: 2127.little_fashion/fonts/bootstrap-icons.woff2
  creating: 2127.little_fashion/images/
  inflating: 2127.little_fashion/images/cody-lannom-G95AReIh_Ko-unsplash.jpeg
  creating: 2127.little_fashion/images/header/
  inflating: 2127.little_fashion/images/header/businesspeople-meeting-office-working.jpg
  inflating: 2127.little_fashion/images/header/positive-european-woman-has-break-after-work.jpg
```

```
[root@pratiksha:var/www/jot]# cd /var/www/job
[root@pratiksha job]# wget https://www.free-css.com/assets/files/free-css-templates/download/page296/finexo.zip
--2024-06-06 12:49:52-- https://www.free-css.com/assets/files/free-css-templates/download/page296/finexo.zip
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:f000::28f
Connecting to www.free-css.com (www.free-css.com)|217.160.0.242|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2094048 (2.0M) [application/zip]
Saving to: 'finexo.zip'.
```

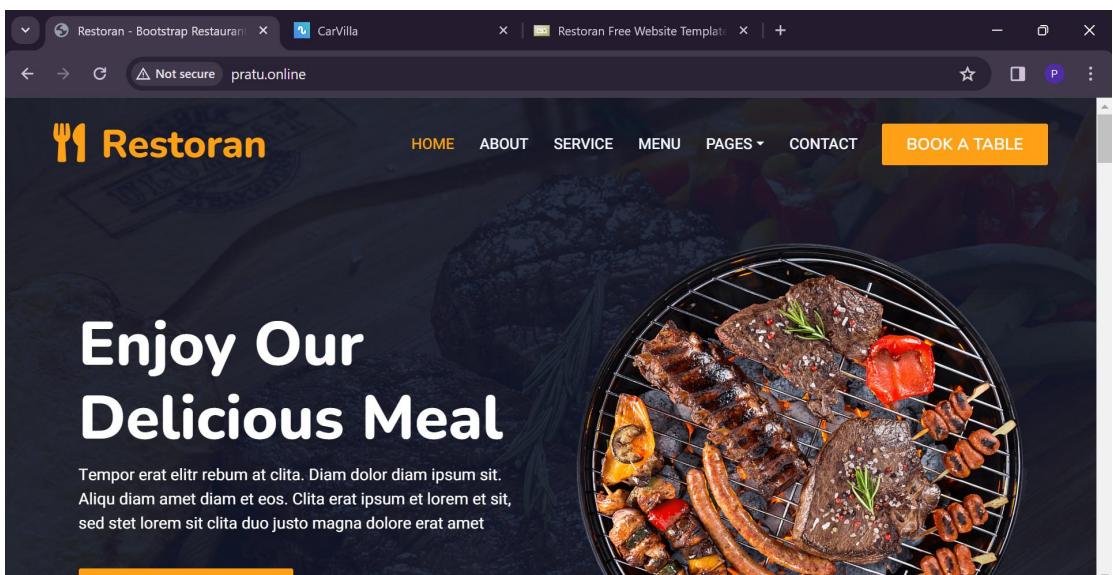
finexo.zip. 100%[=====] 2.00M 874KB/s in 2.3s

2024-06-06 12:49:56 (874 KB/s) - 'finexo.zip' saved [2094048/2094048]

```
[root@pratiksha job]# ls
finexo.zip
[root@pratiksha job]# unzip finexo.zip.
Archive: finexo.zip
  creating: finexo-html/
  inflating: finexo-html/about.html
  creating: finexo-html/css/
  inflating: finexo-html/css/bootstrap.css
  inflating: finexo-html/css/font-awesome.min.css
  inflating: finexo-html/css/responsive.css
  inflating: finexo-html/css/style.css
  inflating: finexo-html/css/style.css.map
  inflating: finexo-html/css/style.scss
  creating: finexo-html/fonts/
  inflating: finexo-html/fonts/fontawesome-webfont.ttf
  inflating: finexo-html/fonts/fontawesome-webfont.woff
  inflating: finexo-html/fonts/fontawesome-webfont.woff2
  creating: finexo-html/images/
  inflating: finexo-html/images/about-img.jpg
  inflating: finexo-html/images/about-img.png
```

```
[root@pratiksha ~]# chown -R apache:apache /var/www  
[root@pratiksha ~]# chmod -R 755 /var/www  
[root@pratiksha ~]# systemctl restart httpd  
[root@pratiksha ~]# |
```

```
<VirtualHost *:80>
    ServerName job.pratu.online
    DocumentRoot /var/www/html
</VirtualHost>
```



Solved by-Pratiksha Pawar