Assignments:10

Module:- COSA(ec-zone& kp-zone& Reverse lookup address)

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Lab Assignment :-

1. Install and configure bind server and create a domain "with_your_Name_ec.in and your_Name_kp.in " with following records: A. Name server for "your_Name_ec.in" : 192.168.3.212 B. Web server ip for "your_Name_ec.in" : 192.168.3.210 C. Mail server ip for "your_Name_ec.in": 192.168.3.211 D. Name server for "your_Name_kp.in" : 192.168.3.212 E. Web server for "your_Name_kp.in" : 192.168.3.210 F. Mail Server for "your_Name_kp.in" : 192.168.3.213

In the client machine execute following command to verify the installation:

A.

#nslookup > your_Name_ec.in

>set type=NS

>your_Name_ec.in

>set type=MX

> your_Name_kp.in

> your_Name_ec.in

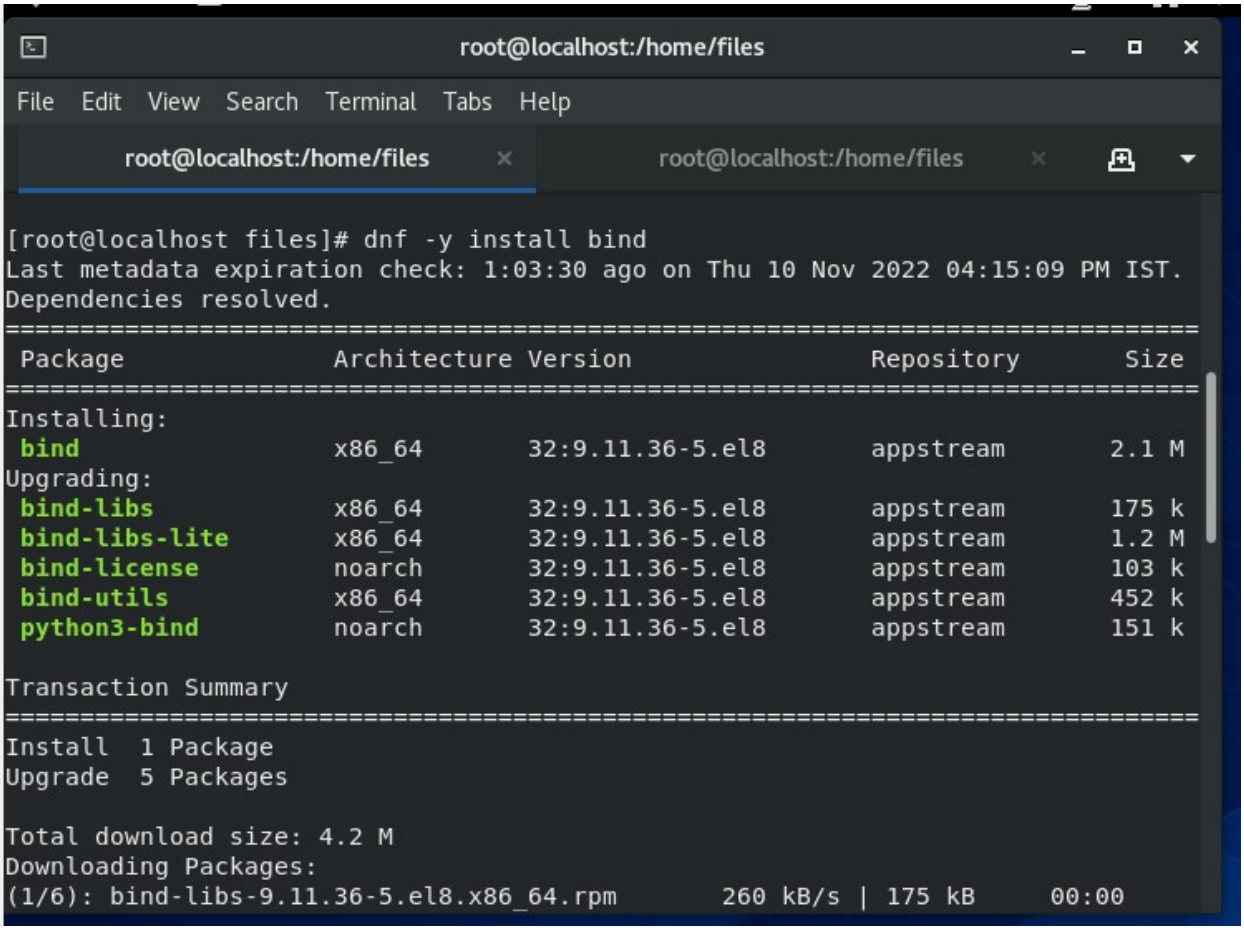
>set type=A

>www. your_Name_ec.in

>www. your_Name_kp.in

SERVER

Step-1:- install the dns server at use bind command



Step-2:- configure DNS server and declare the domain information for prithvirajec.in and prithvirajkp.in domain in /etc/named.conf
#vi /etc/named.conf

```
root@localhost:/var/named
File   Edit   View   Search   Terminal   Help
                  severity dynamic;
        };
};

zone "." IN {
        type hint;
        file "named.ca";
};

zone "ditiss.in" IN {
         type master;
         file "ditiss-zone";
};

zone "prithvirajec.in" IN {
          type master;
          file "ec-zone";
};

zone "prithvirajkp.in" IN {
           type master;
           file "kp-zone";
};

include "/etc/named.rfc1912.zones";
include "/etc/named.root.key";
```

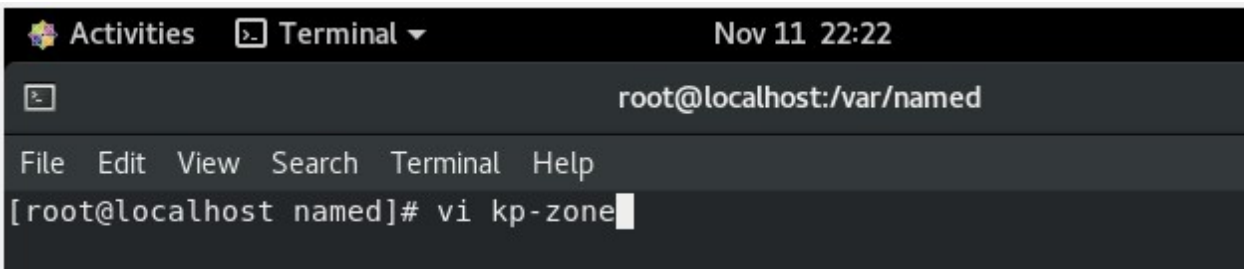
Step-3:- to check configuration error

```
[root@localhost ~]# named-checkconf /etc/named.conf
[root@localhost ~]# cd /var/named
[root@localhost named]# vi ec-zone
[root@localhost named]#
```

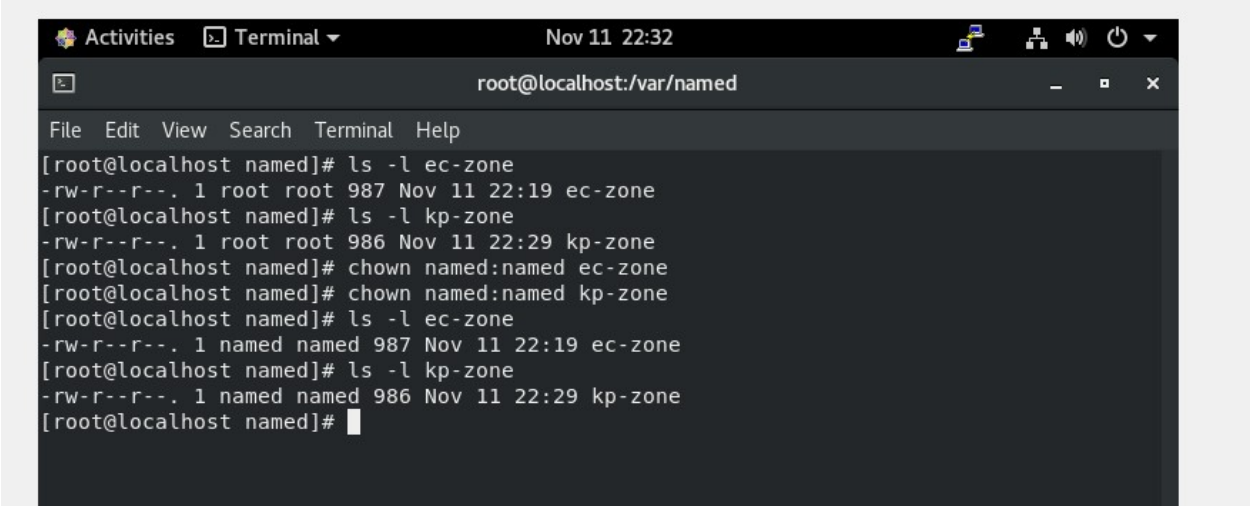
Step-4:- create a zone file “prithvirajec.in” /var/named.

```
File   Edit   View   Search   Terminal   Help
;LABEL                  TTL             CLASS           TYPE          RDATA

prithvirajec.in.       600              IN              SOA           ns.prithviraj.in. roo
t.prithviraj.in. (
                                                                      20221110;serial
                                                                      1D;refresh
                                                                      3H;retry
                                                                      7D;expiry
                                                                      2H;minimal

)
prithvirajec.in.       600              IN              NS            ns.prithvirajec.in.
ns.prithvirajec.in.    600              IN              A             192.168.3.212
mail.prithvirajec.in.  600              IN              A             192.168.3.211
www.prithvirajec.in.   600              IN              A             192.168.3.210
~
```

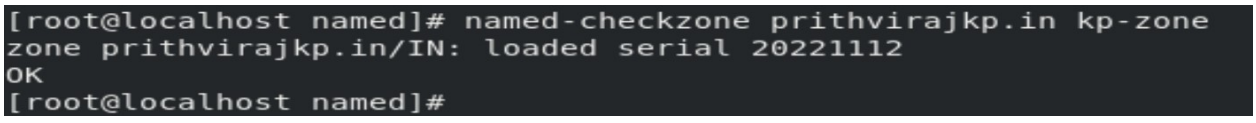
Step-5:- create a zone file “prithvirajkp.in” /var/named.



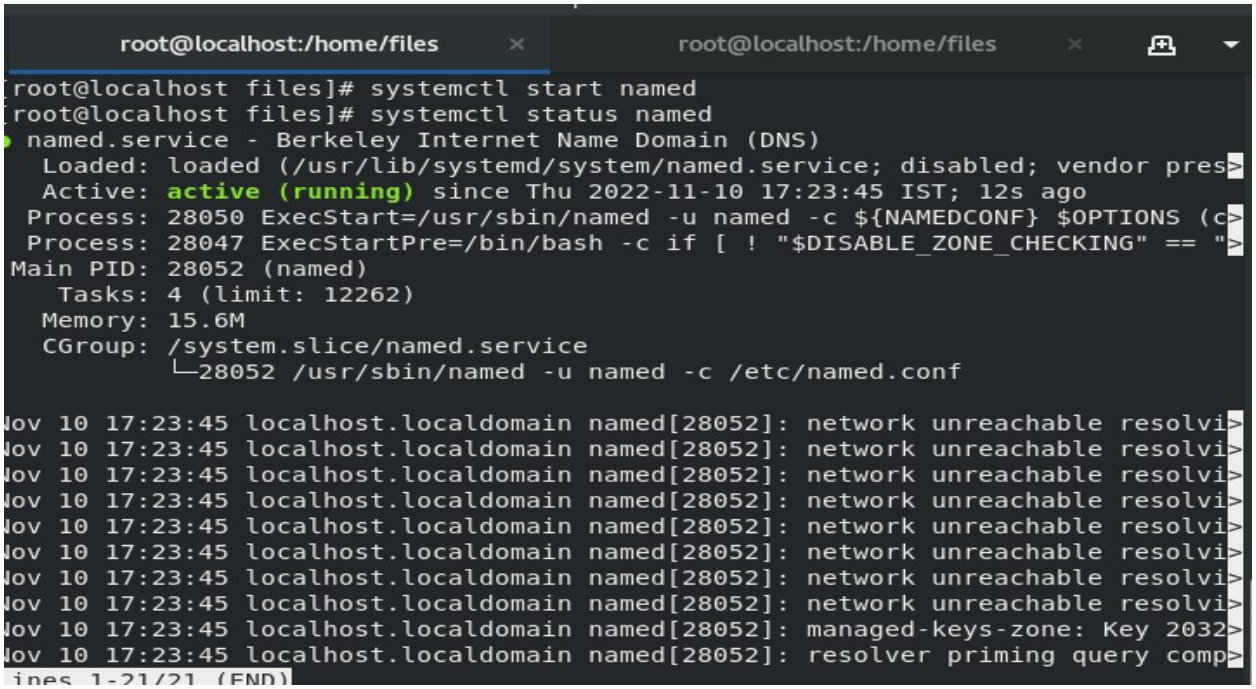
Step-6:- change the ownership of ec-zone and kp-zone



Step-7:- check the zone file for the error



Step-8:- restart DNS server

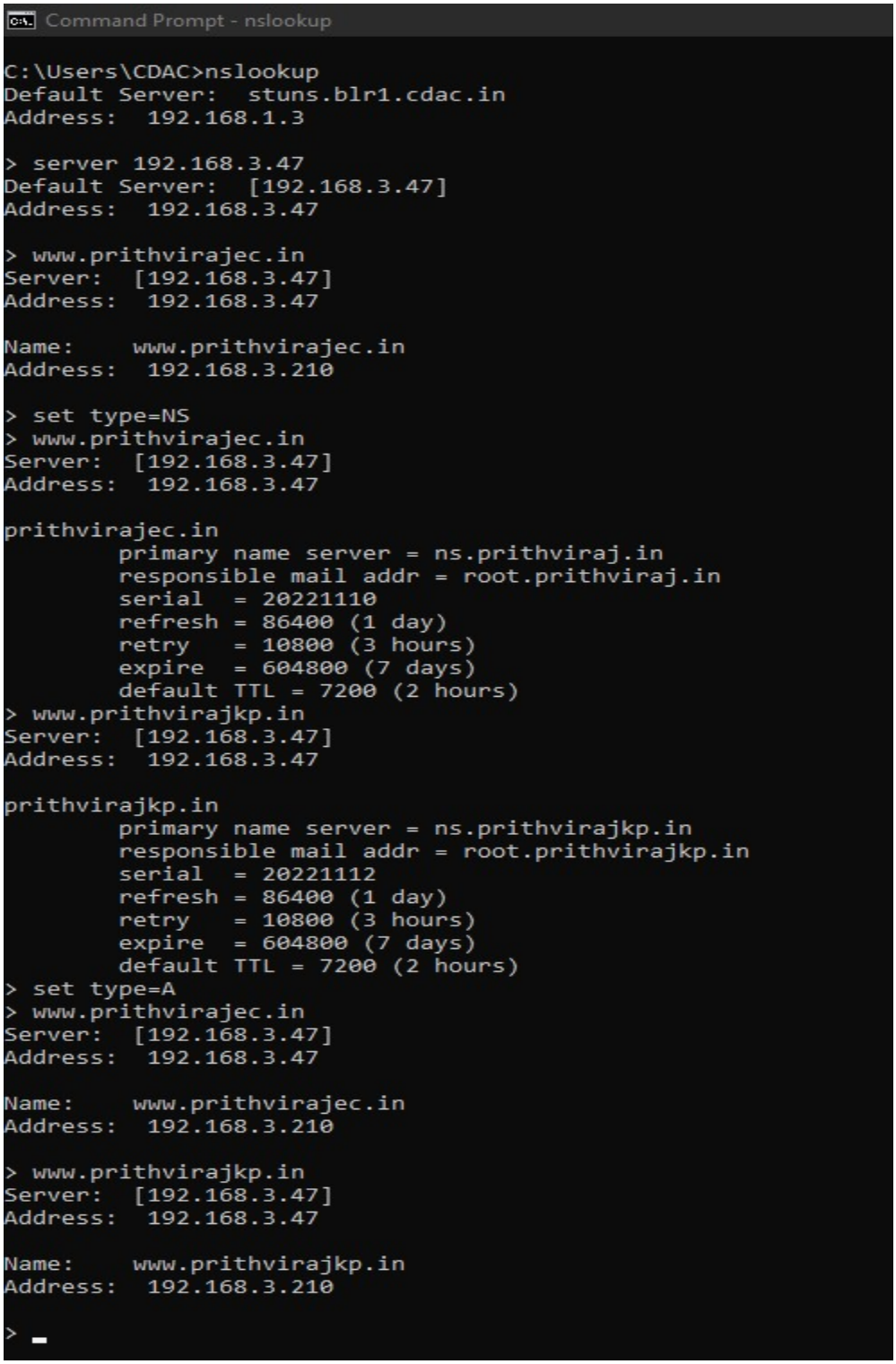


Step-9:-Stop Firewalld and run netstat command.

```
[root@localhost named]# systemctl stop firewalld
[root@localhost named]# iptables -F
[root@localhost named]# setenforce 0
[root@localhost named]# netstat -puna|more
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Pro
gram name
udp        0      0 192.168.3.47:53         0.0.0.0:*                           3750/na
med
udp        0      0 192.168.122.1:53        0.0.0.0:*                           1280/dn
smasq
udp        0      0 0.0.0.0:67              0.0.0.0:*                           1280/dn
smasq
udp        0      0 192.168.3.47:68         192.168.1.3:67          ESTABLISHED 841/Net
workManager
udp        0      0 0.0.0.0:111             0.0.0.0:*                           1/syste
md
udp        0      0 0.0.0.0:123             0.0.0.0:*                           687/chr
onyd
udp        0      0 0.0.0.0:38033           0.0.0.0:*                           690/ava
hi-daemon: r
udp        0      0 0.0.0.0:5353            0.0.0.0:*                           690/ava
hi-daemon: r
udp        0      0 127.0.0.1:323           0.0.0.0:*                           687/chr
```

Client

Step-1:- go to client side on command prompt



```
> set type=MX
> www.prithvirajec.in
Server:  [192.168.3.47]
Address:  192.168.3.47

prithvirajec.in
        primary name server = ns.prithviraj.in
        responsible mail addr = root.prithviraj.in
        serial  = 20221110
        refresh = 86400 (1 day)
        retry   = 10800 (3 hours)
        expire  = 604800 (7 days)
        default TTL = 7200 (2 hours)
> google.com
Server:  [192.168.3.47]
Address:  192.168.3.47

Non-authoritative answer:
google.com      MX preference = 10, mail exchanger = smtp.google.com

google.com      nameserver = ns3.google.com
google.com      nameserver = ns2.google.com
google.com      nameserver = ns4.google.com
google.com      nameserver = ns1.google.com
ns2.google.com  internet address = 216.239.34.10
ns1.google.com  internet address = 216.239.32.10
ns3.google.com  internet address = 216.239.36.10
ns4.google.com  internet address = 216.239.38.10
ns2.google.com  AAAA IPv6 address = 2001:4860:4802:34::a
ns1.google.com  AAAA IPv6 address = 2001:4860:4802:32::a
ns3.google.com  AAAA IPv6 address = 2001:4860:4802:36::a
ns4.google.com  AAAA IPv6 address = 2001:4860:4802:38::a
> cdac.in
Server:  [192.168.3.47]
Address:  192.168.3.47

Non-authoritative answer:
cdac.in MX preference = 5, mail exchanger = mx4.cdac.in
cdac.in MX preference = 1, mail exchanger = mx1.cdac.in

cdac.in nameserver = ns2.easydns.com
cdac.in nameserver = remote1.easydns.com
cdac.in nameserver = remote3.easydns.com
cdac.in nameserver = ns2.cdac.in
cdac.in nameserver = ns1.cdac.in
cdac.in nameserver = ns2-v6.cdac.in
cdac.in nameserver = ns1-v6.cdac.in
cdac.in nameserver = ns1.easydns.com
cdac.in nameserver = remote2.easydns.com
ns1-v6.cdac.in  internet address = 196.1.113.248
ns2.cdac.in     internet address = 196.1.113.249
ns2-v6.cdac.in  internet address = 196.1.113.249
ns1.cdac.in     internet address = 196.1.113.248
>
```

2. Configure DNS Server for reverse lookup for the network 192.168.1.0/24.