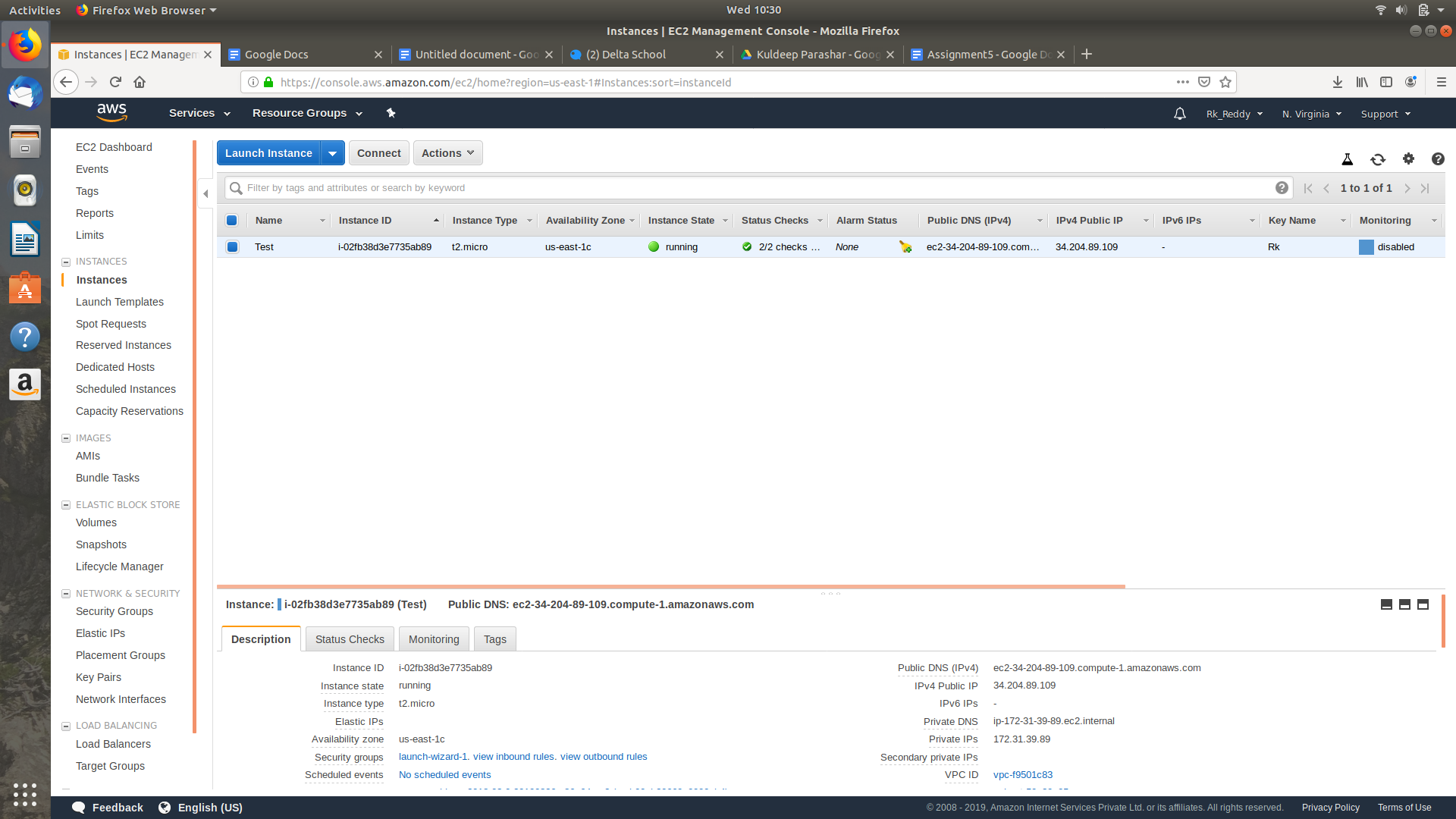
**Web Servers**

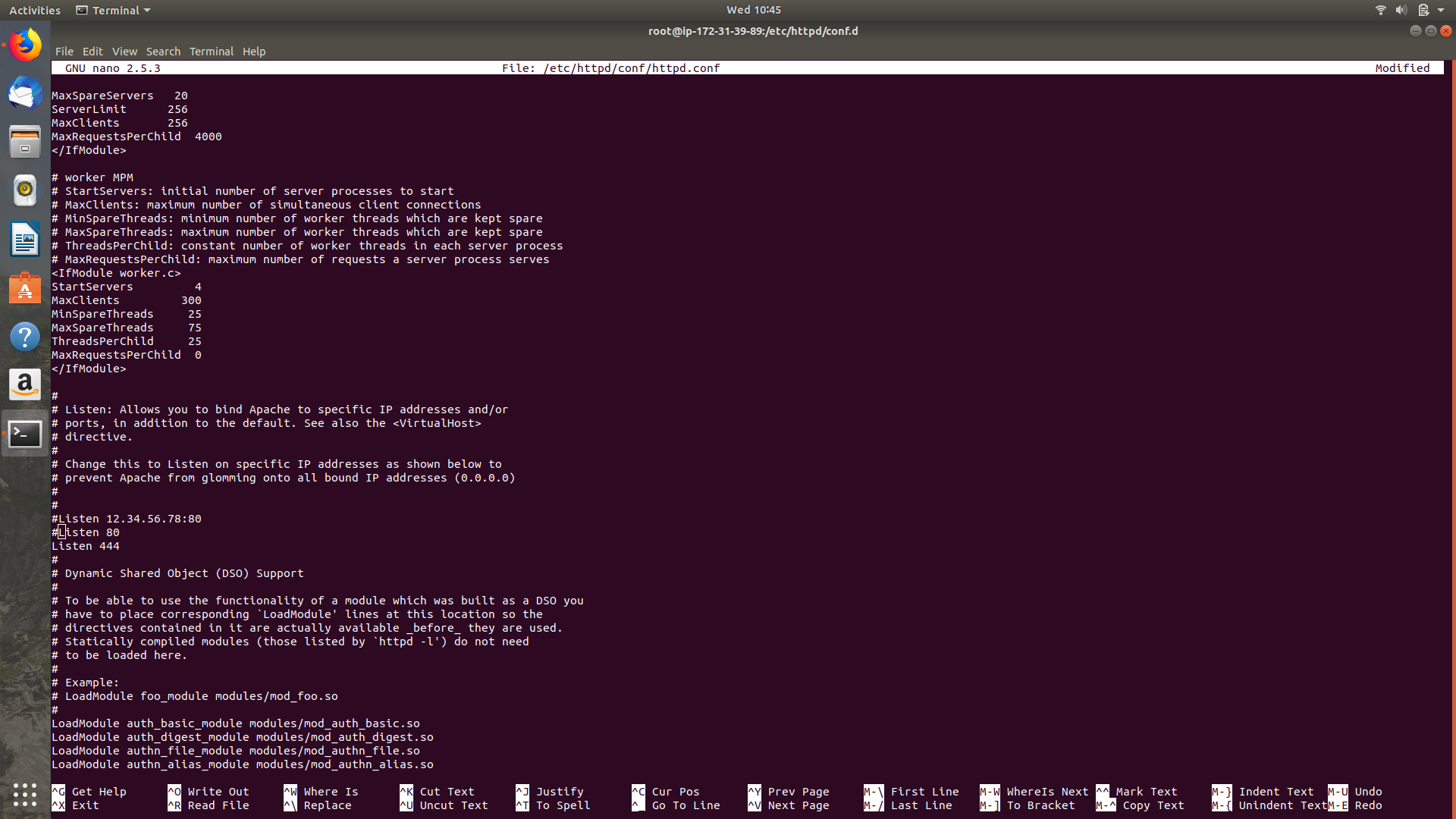
**1.Httpd**

First,Launch an ec2 Instance

Here, we need to run httpd service on 444 port

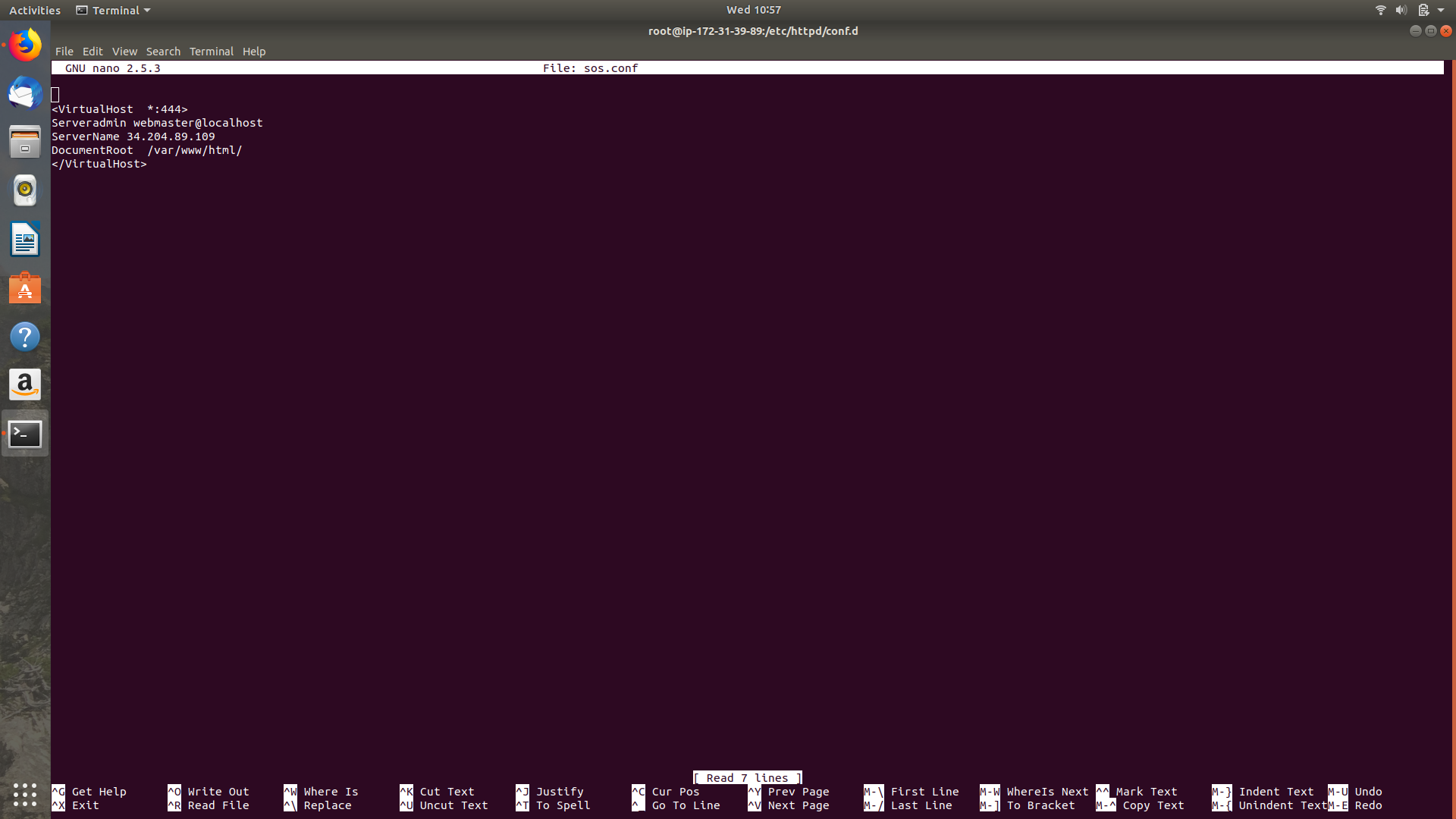
So, While Launching EC2 Instance we need to add 444 in Security Group of Virtual Server

****

****

In httpd.conf file add Listen 444

Conf File

****

Conf File

<VirtualHost \*:444>

ServerAdmin 34.204.89.109

DocumentRoot /var/www/html

</virtualHost>

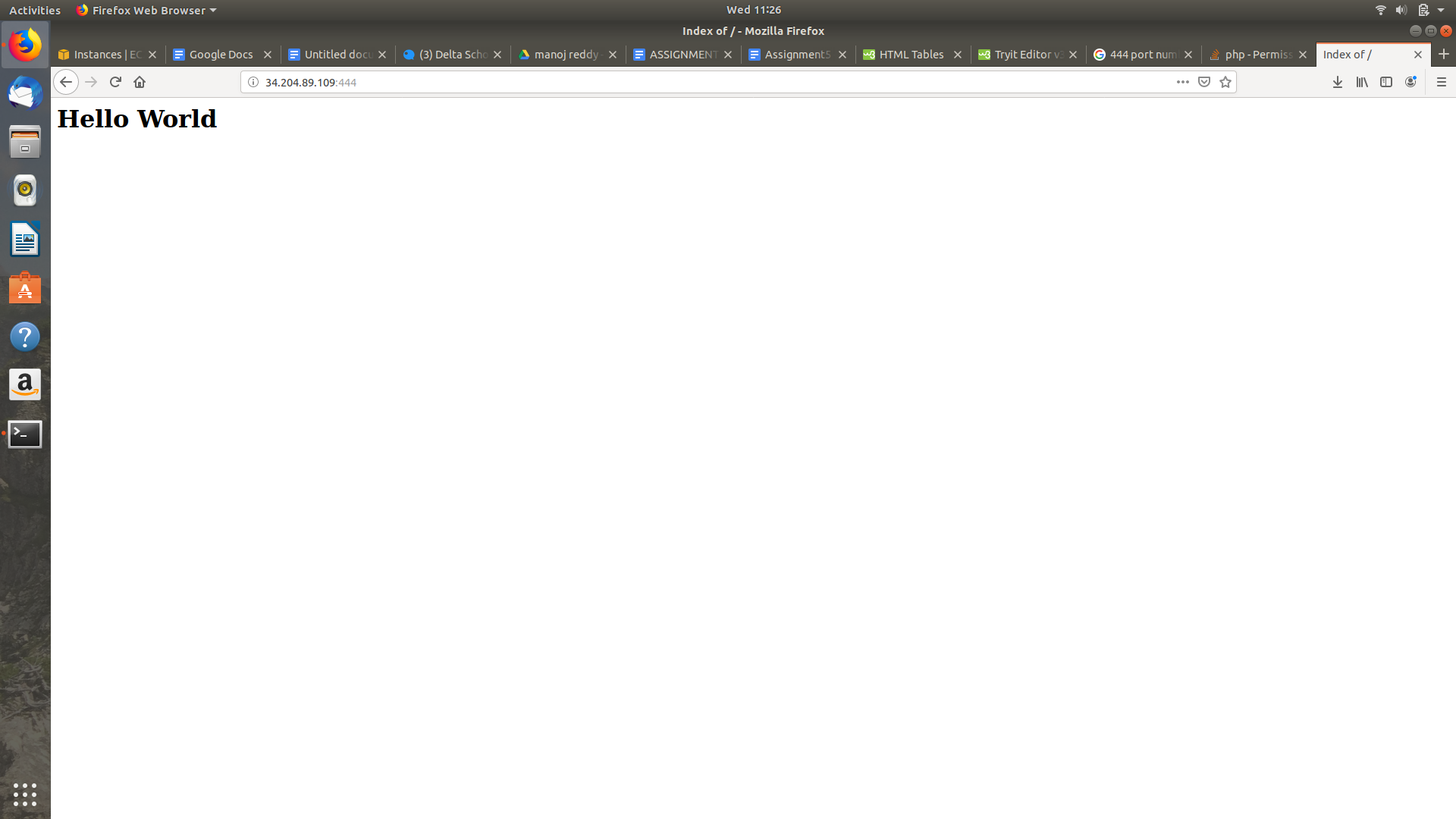
Save it

$httpd -t

$service httpd reload

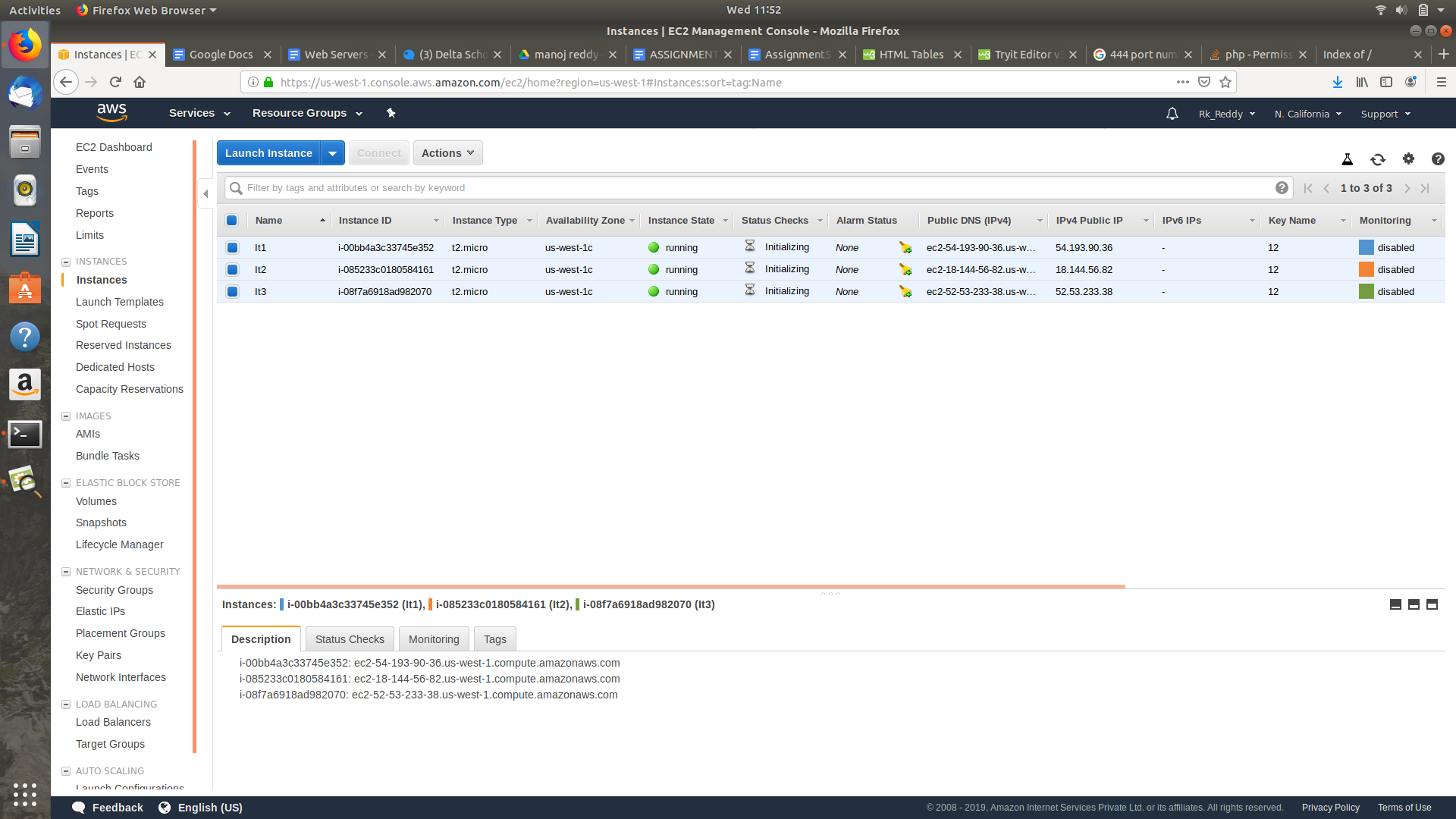
$service httpd restart

Output :

****

**Nginx Load Balancer**

Simultaneously Launch 3 instances

****

Type sudo su in all instances to get redirected into the root mode

>Install Nginx in all three Instances

>In first instance

$cd /var/www/html

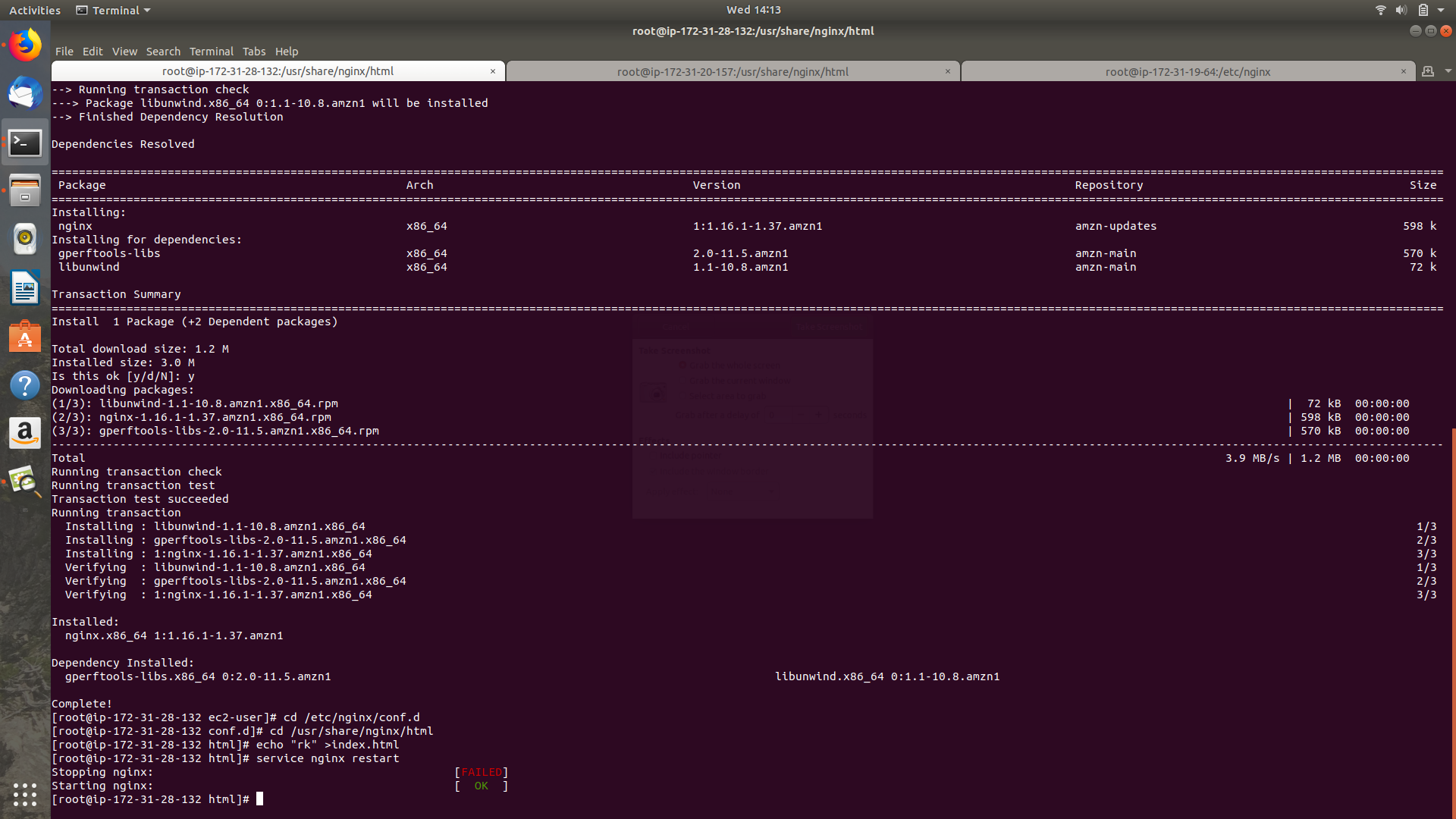
$nano index.html

$cd /etc/nginx/conf.d

$cd /usr/share/nginx/html

$echo "rk" > index.html

$service nginx restart

****

>In second instance

--->In second instance

$cd /var/www/html

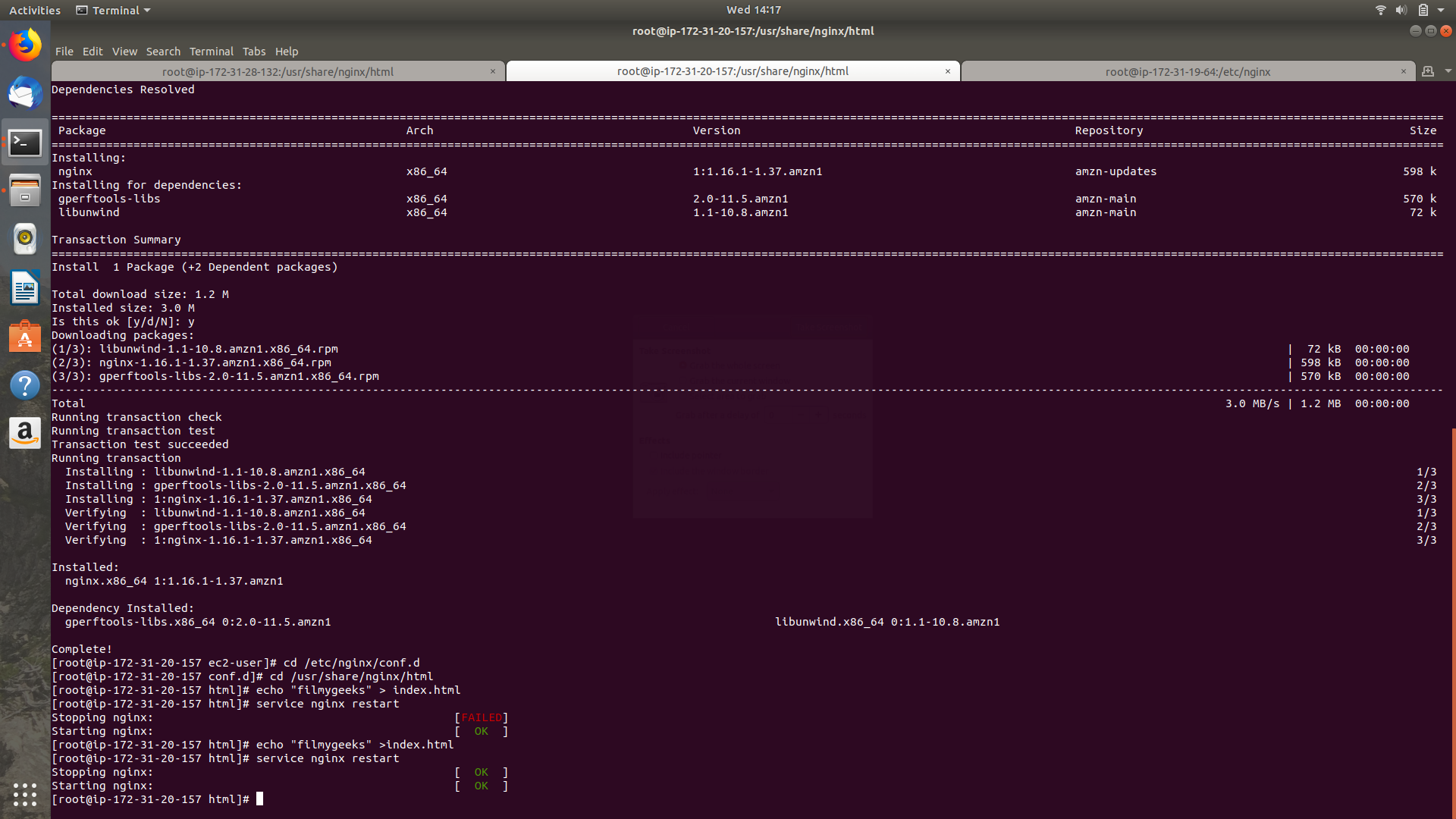
$nano index.html

$cd /etc/nginx/conf.d

$cd /usr/share/nginx/html

$echo "filmygeeks" > index.html

$service nginx restart

****

>In Third Instance

$cd /etc/nginx/conf.d

$nano rk.conf

upstream rk

{

server 54.193.90.36;

server 18.144.56.82;

}

server

{

listen 80;

location /

{

proxy\_pass http://rk;

}

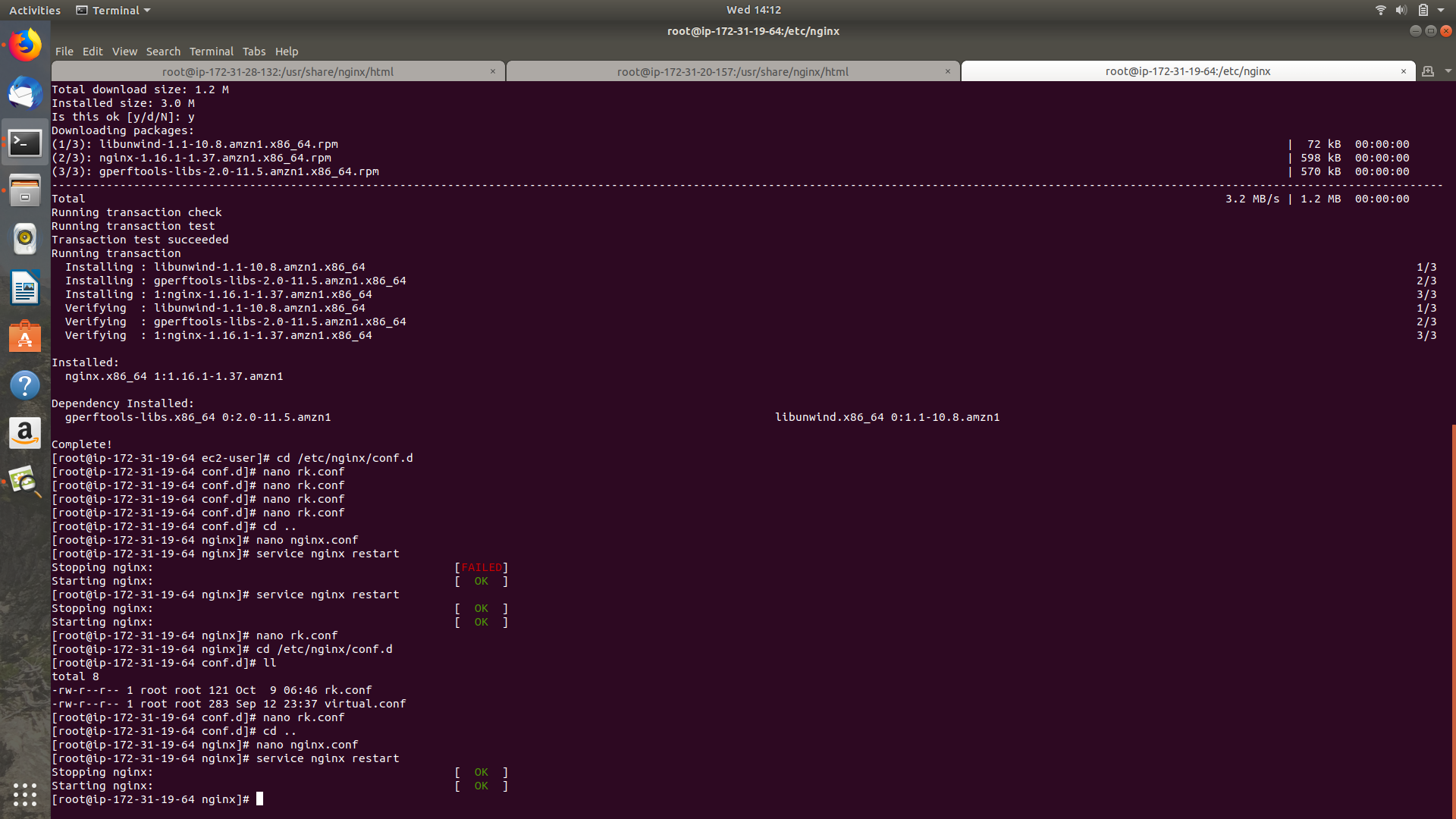
}

Save It

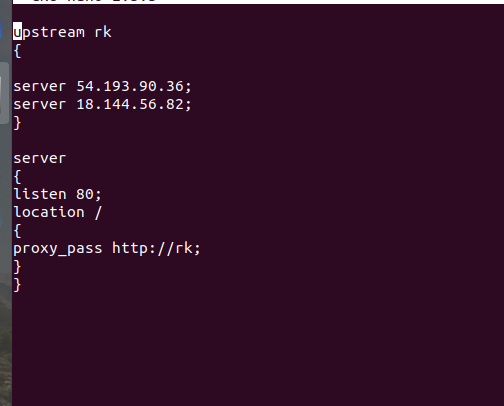
$cd ..

$nano nginx.conf

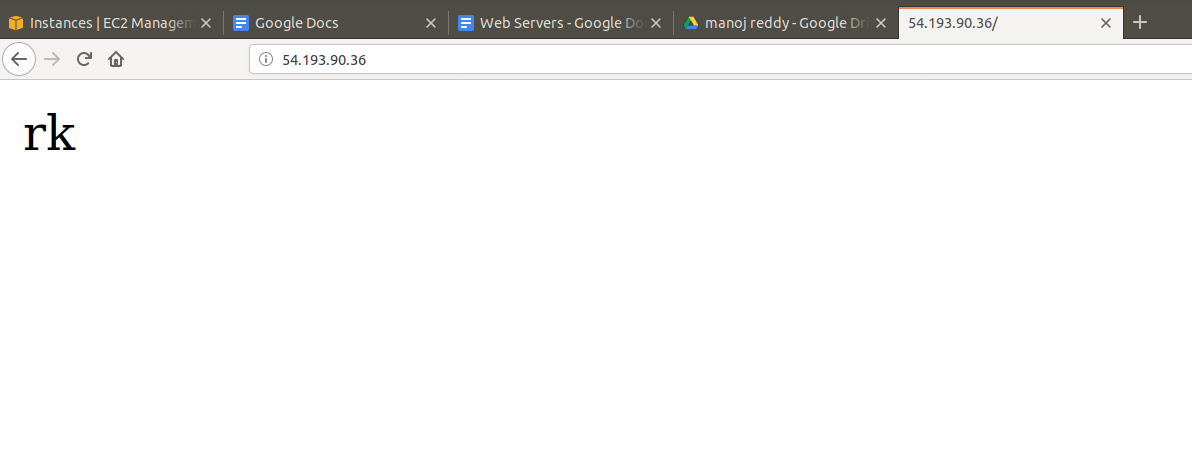
$service nginx restart

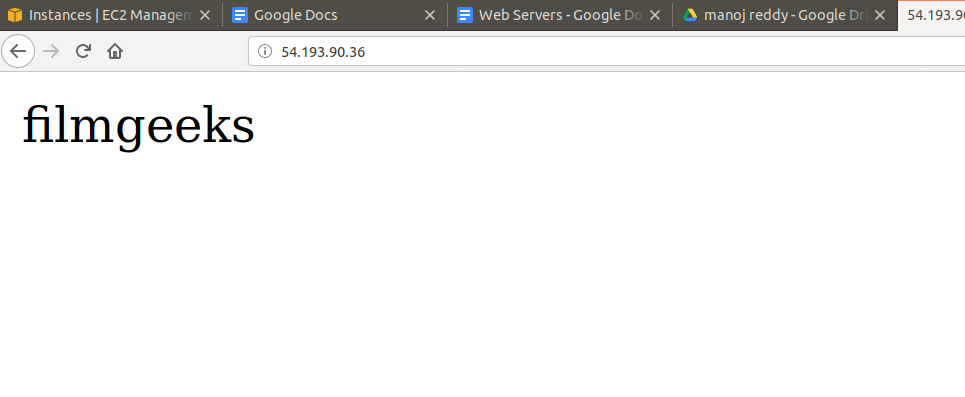
****

**Conf file**

****

Here,Below is the output

****

****

Ngnix uses round-robin algorithm by default

and

Other methods are :

Least\_conn

Ip\_hash

Weight

Max\_Fails

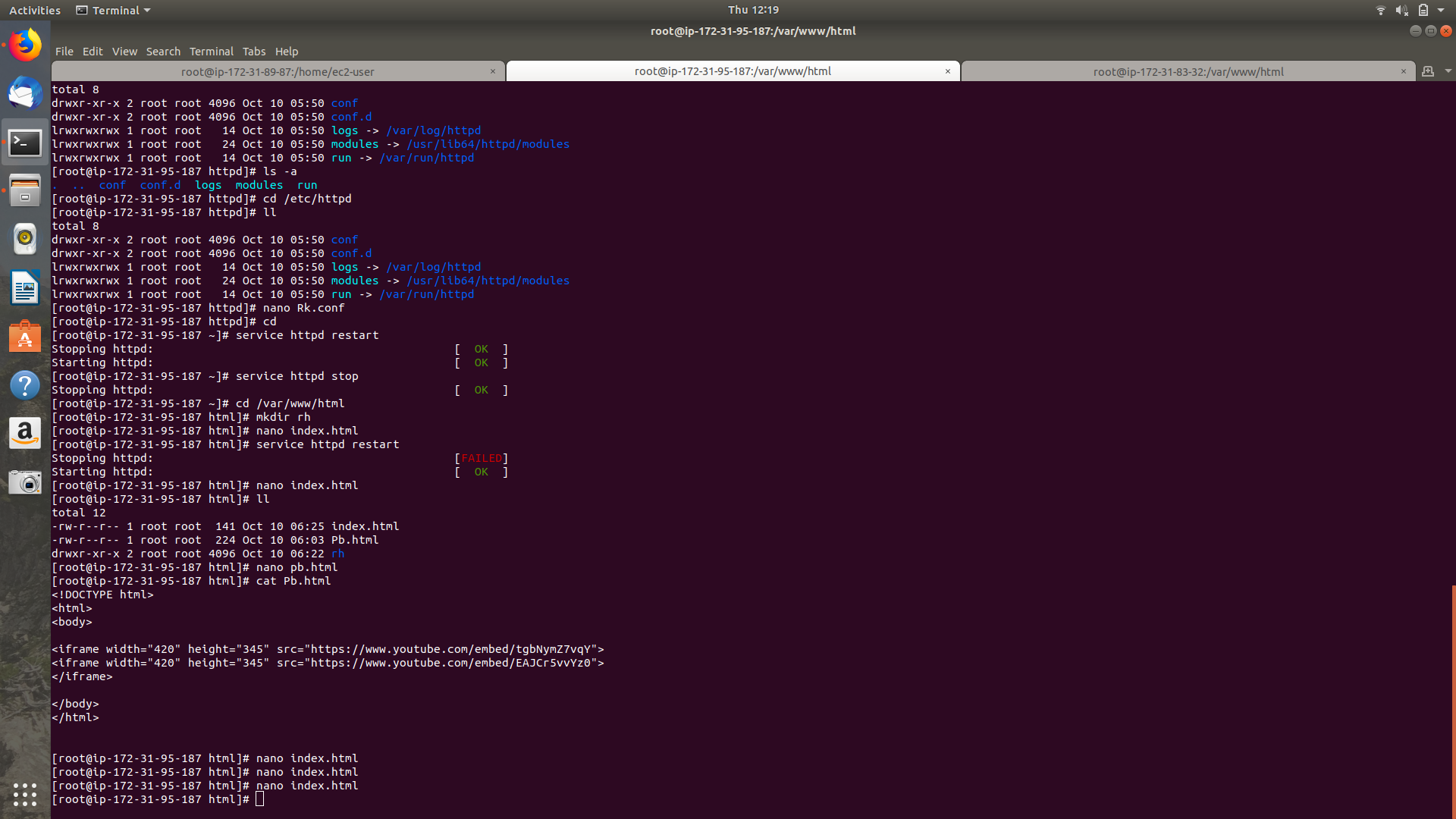
Fail\_Timeout

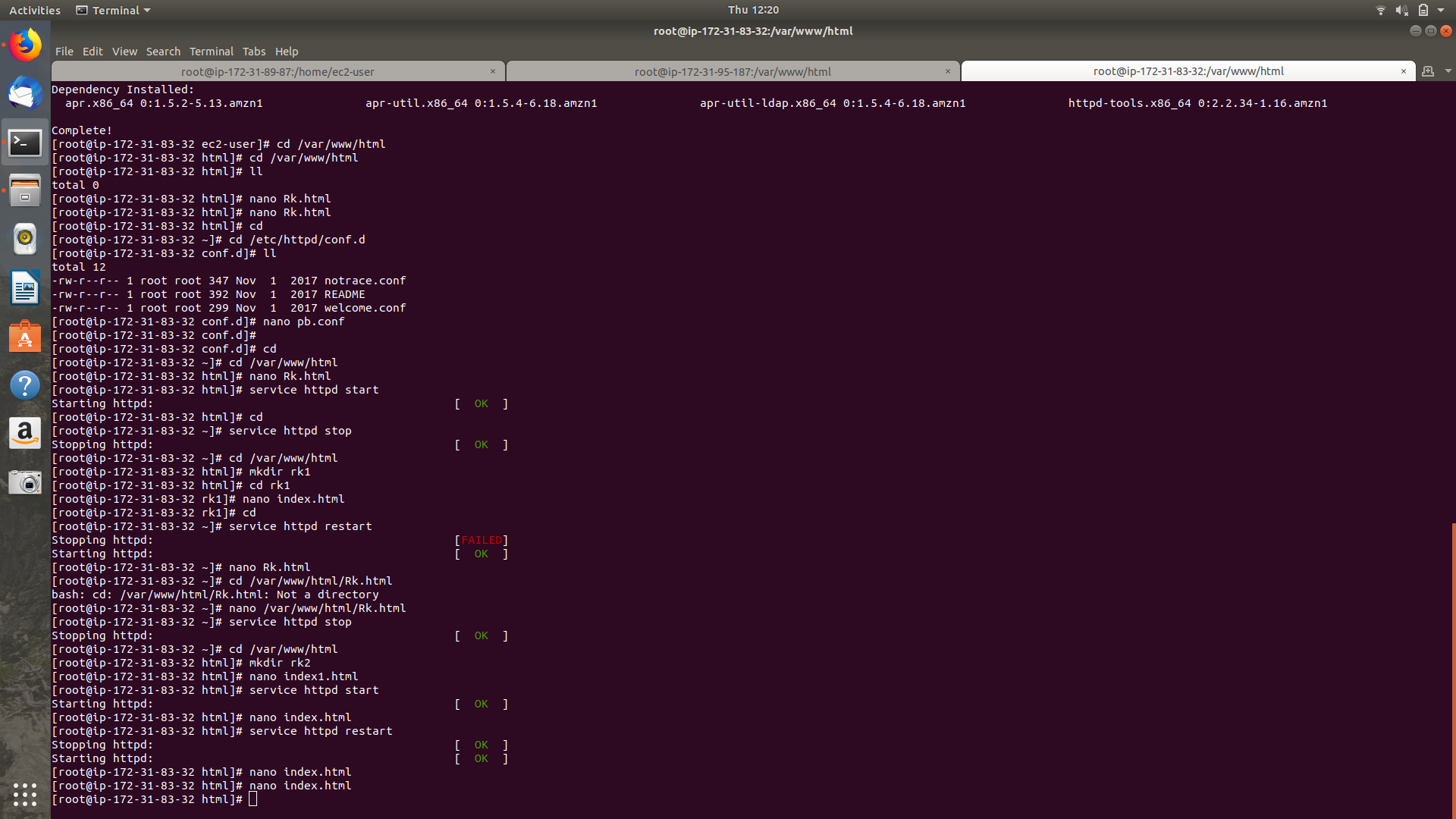
Down

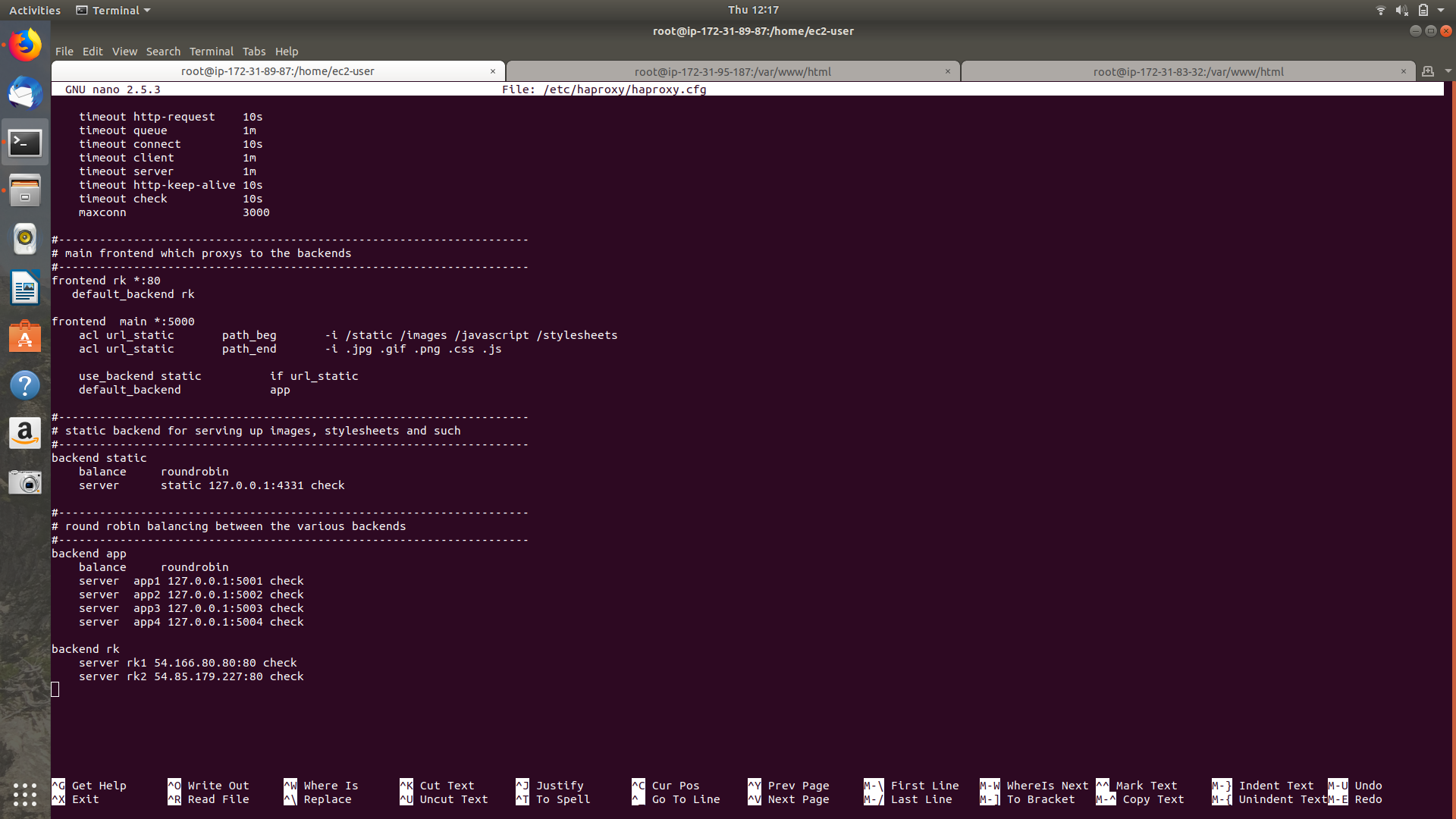
**Haproxy**

[HAProxy](http://www.knowarth.com/haproxy-load-balancer-configuration/) is an open source, free, very fast and reliable solution offering high availability, load balancing and proxying for TCP and HTTP-based applications. It is particularly suited for web sites crawling under very high loads while needing persistence or Layer7 processing. It distributes a workload across a set of servers to maximize performance and optimize resource usage.

For Performing Load balancing Using Haproxy we Need to launch three EC2 Instances. ->Install httpd in Two servers and install haproxy in oneserver(Loadbalancer)

****

****

****

When you configure load balancing using HAProxy, there are two types of nodes which need to be defined: frontend and backend. The frontend is the node by which HAProxy listens for connections. Backend nodes are those by which HAProxy can forward requests. A third node type, the stats node, can be used to monitor the load balancer and the other two nodes.

Add these text in $nano /etc/haproxy/haproxy.conf

frontend rk \*:80

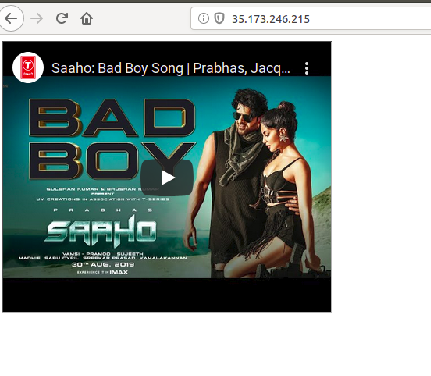
Default\_backend ec2

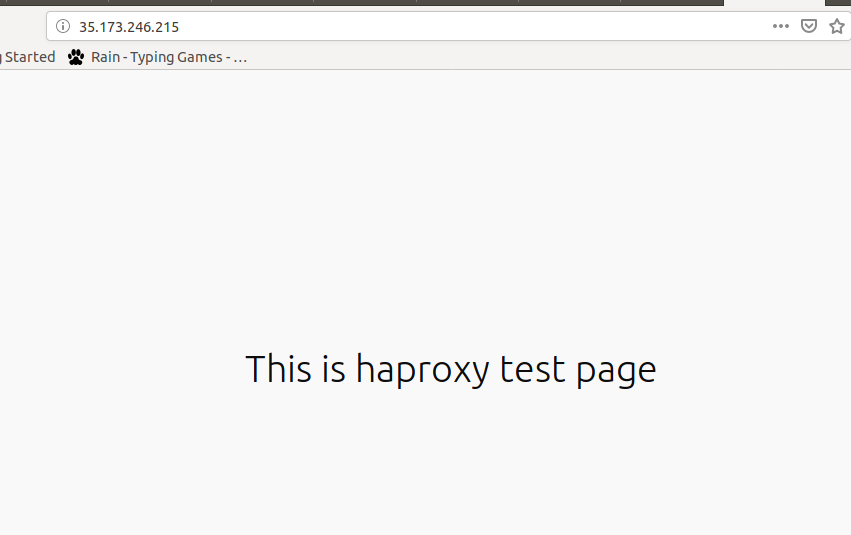
In the backend

backend ec21 54.85.179.227:80 check

backend ec22 54.166.80.80:80 check

Here, Below is the output

****

****