

ITIM

PRACTICAL - 7

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Batch : 61(CBA)

Tasks :

Q1 Organization Worklock wants

to setup a webserver where the details about the employee is stored in the directory (name the directory as your name_enrollementnumber) can be accessed. This details of the directory should be accessible via a virtual host

<http://virtualhost.enrollmentnumber.com/yourname>

(i) The webpage should display some content (eg "Employee details")

(ii) The webpage must be configured for the user-based authentication. Only user "yourname" should be allowed to login.

Q2 - Implement a website for <http://enrollmentnumber.yourname.com/group>. Create a directory "groupauth" under the document root used for the website. The webpage should say "Welcome to the group and now you can access the site".

The webpage must be configured for the group-based authentication and require users to login. Users "Jimmy" and "Emma" who

belong to group operations should be able to access the share with password.

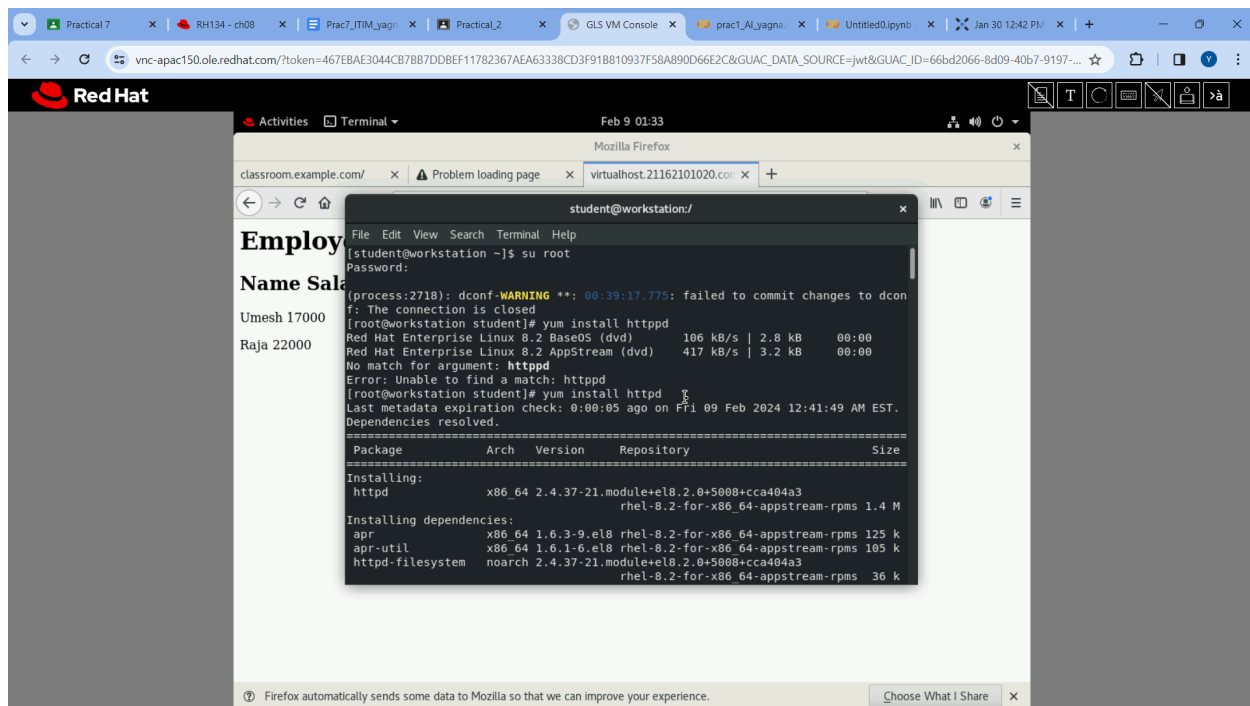
Steps :

Q1 : Organization Worklock wants to setup a webserver where the details about the employee is stored in the directory (name the directory as your name_enrollementnumber) can be accessed. This details of the directory should be accessible via a virtual host <http://virtualhost.enrollmentnumber.com/yourname>

(i) The webpage should display come content (eg "Employee details")

(ii) The webpage must be configured for the user-based authentication. Only user "yourname" should be allowed to login.

Login as root user using **su root** and install httpd service using **yum install httpd**

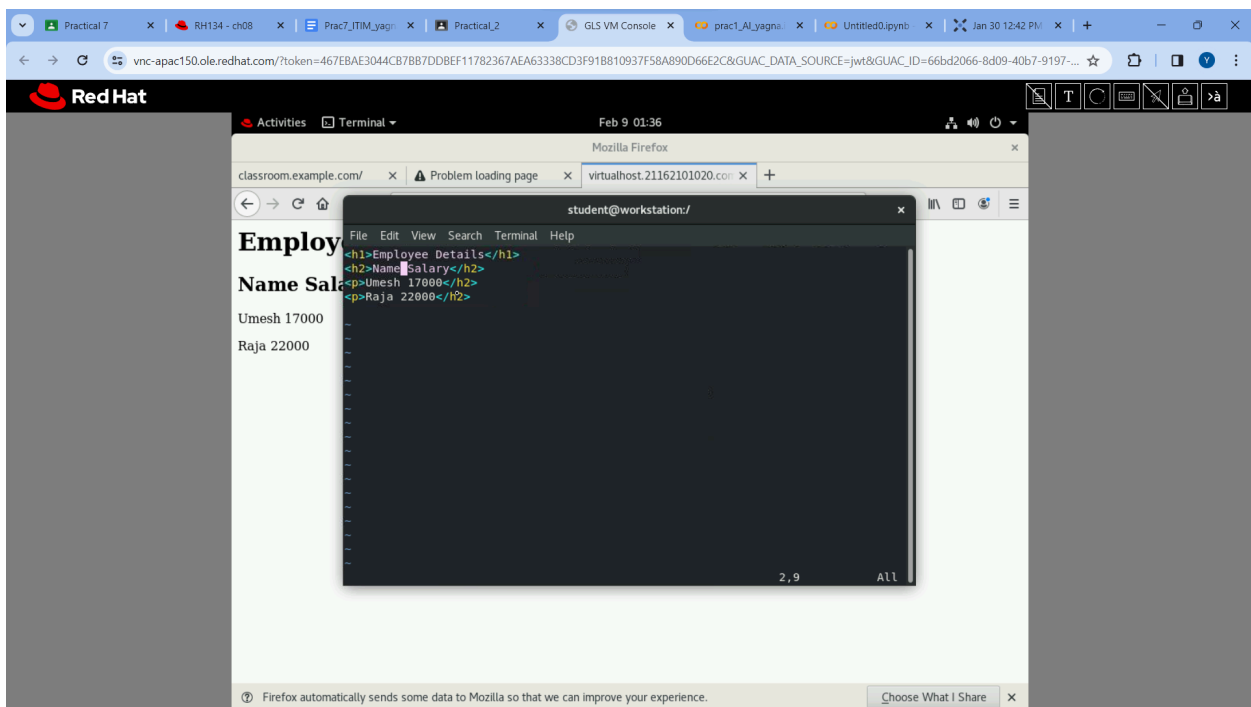


Make a directory using **mkdir yagna_21162101020** and another directory inside according to the url for eg. we need **virtualhost.21162101020.com/yagna** than **yagna** will be the name of the directory we make inside **yagna_21162101020**.

```
[root@workstation html]# mkdir yagna_21162101020
[root@workstation html]# cd yagna_21162101020
```

Adding a index.html using **touch index.html** inside yagna which will be shown on browser

```
[root@workstation yagna_21162101020]# mkdir yagna
[root@workstation yagna_21162101020]# cd yagna
[root@workstation yagna]# touch index.html
[root@workstation yagna]# vim index.html
[root@workstation yagna]# vim index.html
```



Now we to make our directory available on the virtual host and provide authentication open /etc/httpd/conf/httpd.conf file and enter the following details

NameVirtualHost 172.25.250.9:port //port is optional

<VirtualHost 172.25.250.9> // ip address can be taken through ifconfig command

DocumentRoot ../yagna_21162101020 //path of root directory

ServerName virtualhost.21162101020.com //desired domain name

</VirtualHost>

For Authentication :

<Directory '/var/www/html/yagna_21162101020'>

AuthType Basic //Specifies the type of authentication used

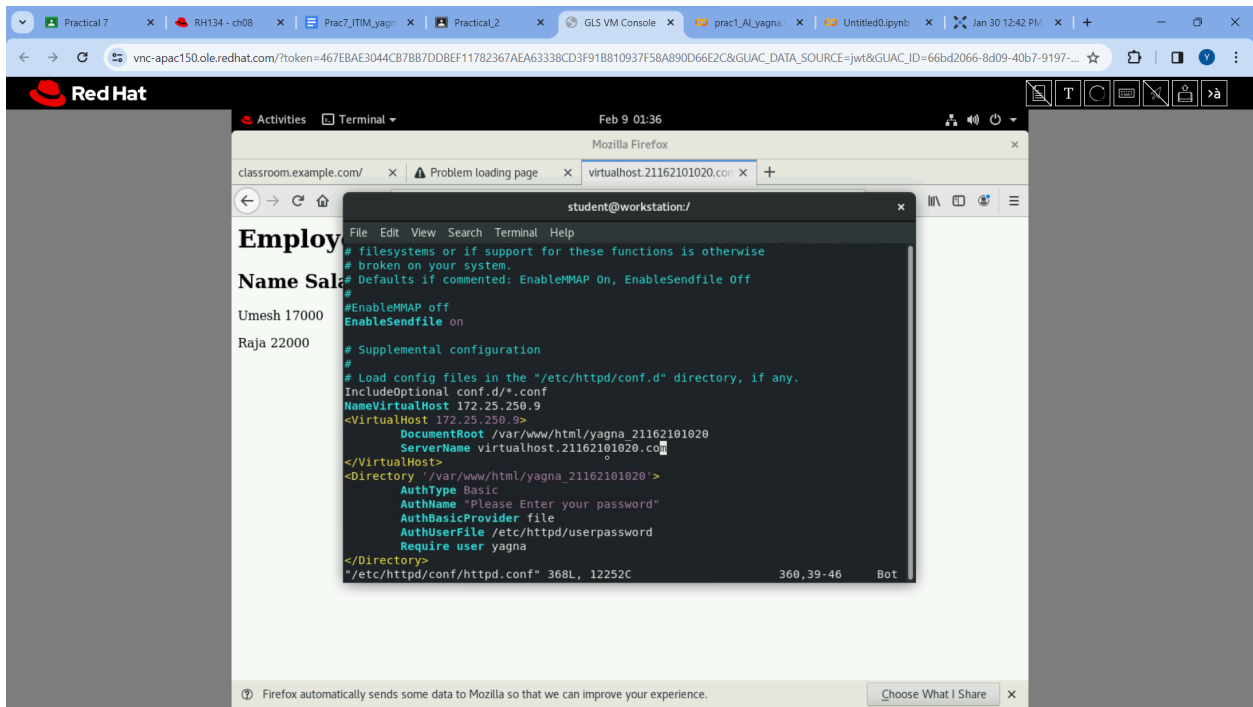
AuthName "Please enter the password" //text show when user accesses the resource

AuthBasicProvider file //user and password will be checked through a file

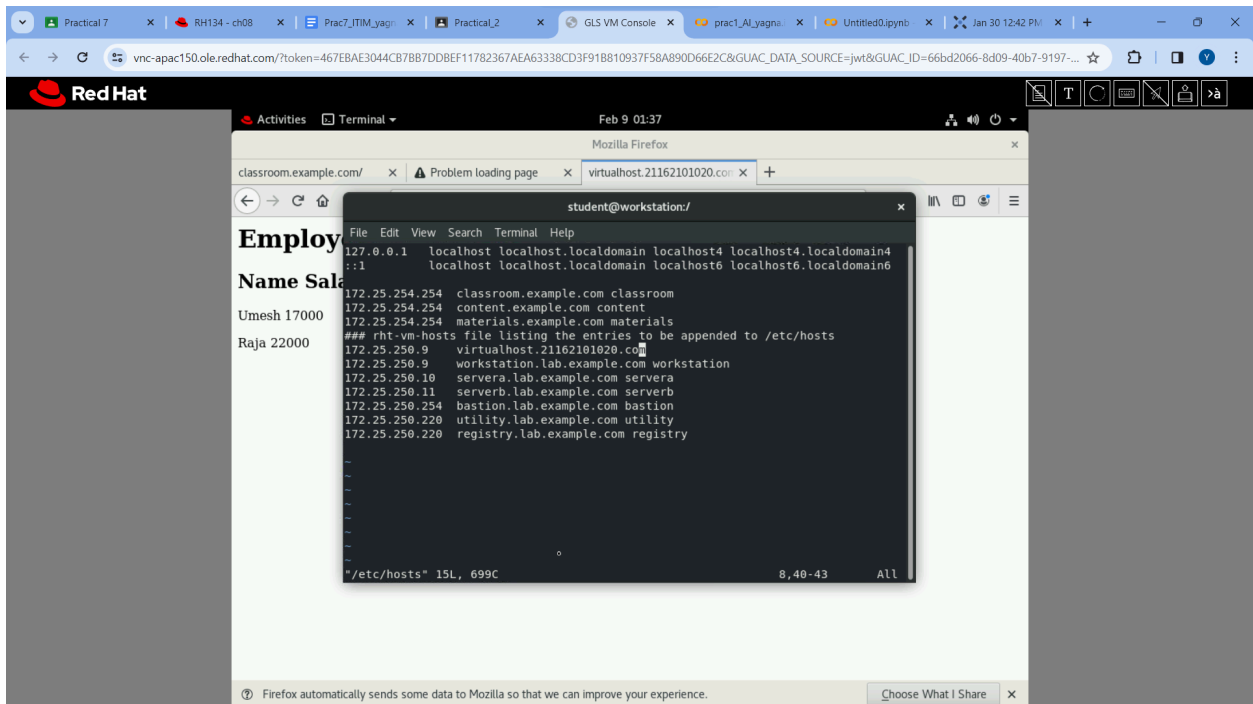
AuthUserFile /etc/httpd/userpassword //the location that contains user details

Require user yagna //only the specified user will be able to access the resource

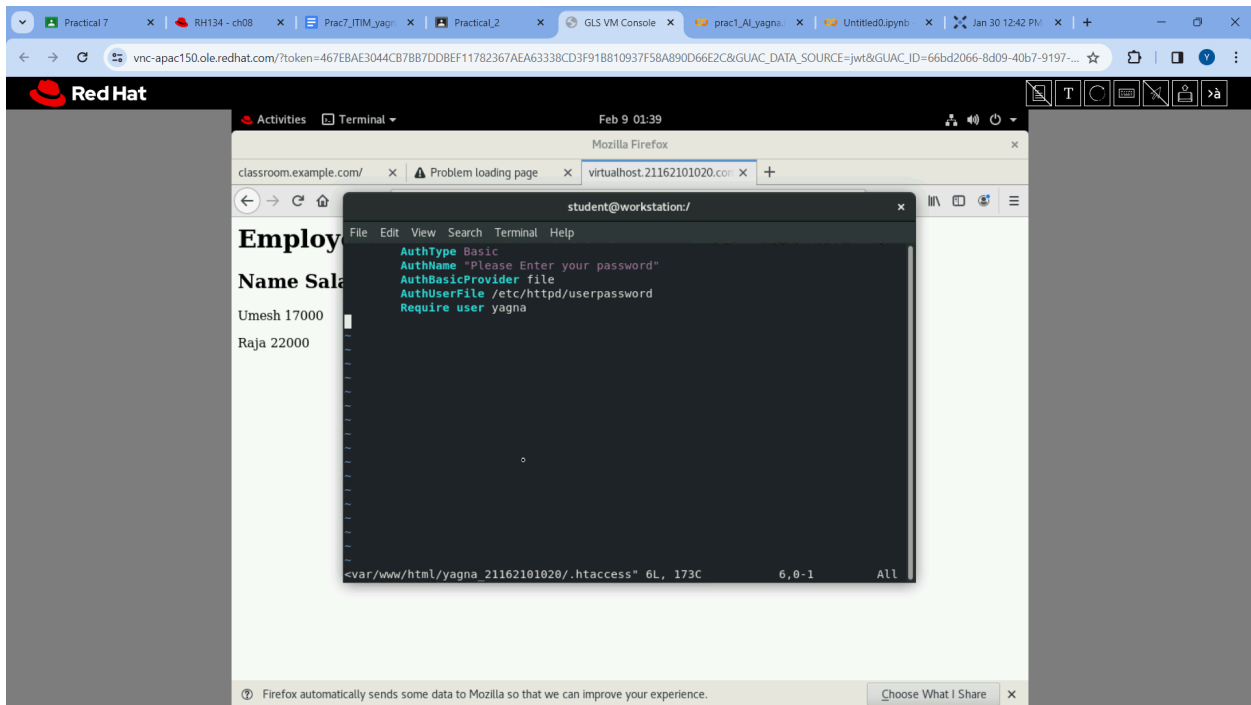
</Directory>



Add the hosts in `/etc/hosts` file : **172.25.250.9 virtualhost.21162101020.com**



Adding the authentication configuration written in httpd.conf file to
../yagna_21162101020/.htaccess



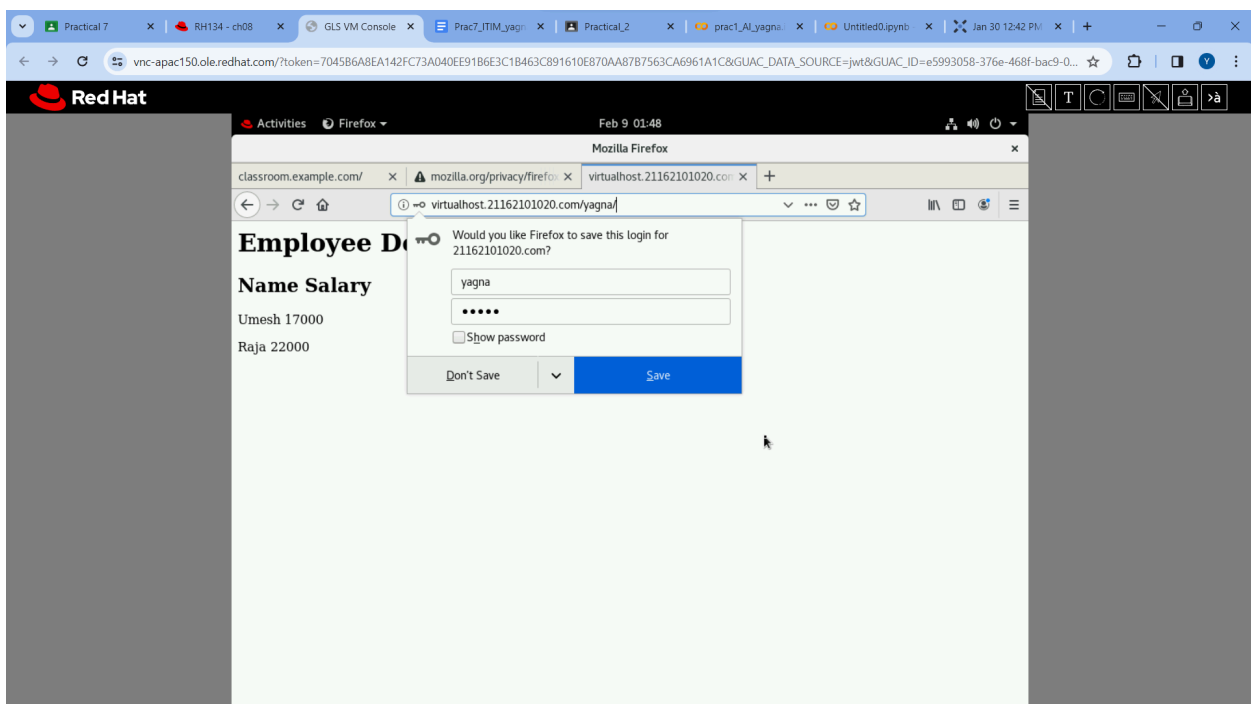
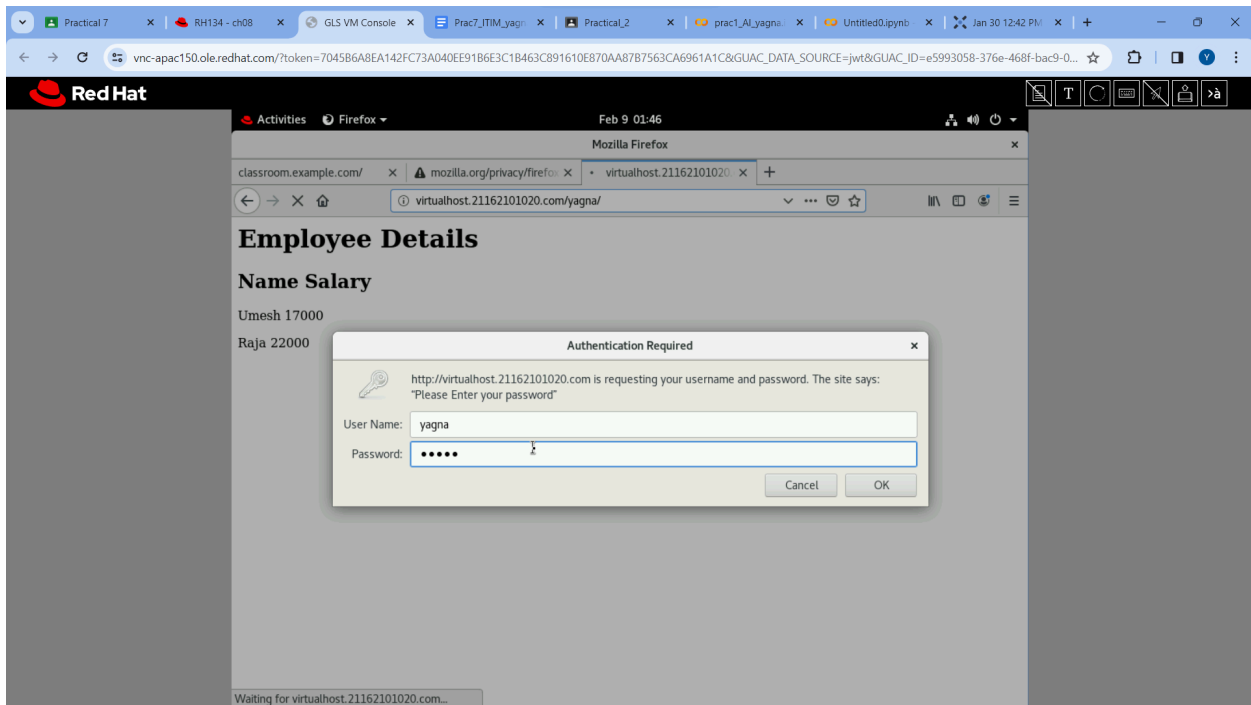
(Forgot to take screenshot) To make user : **htpasswd -c /etc/httpd/userpassword yagna**

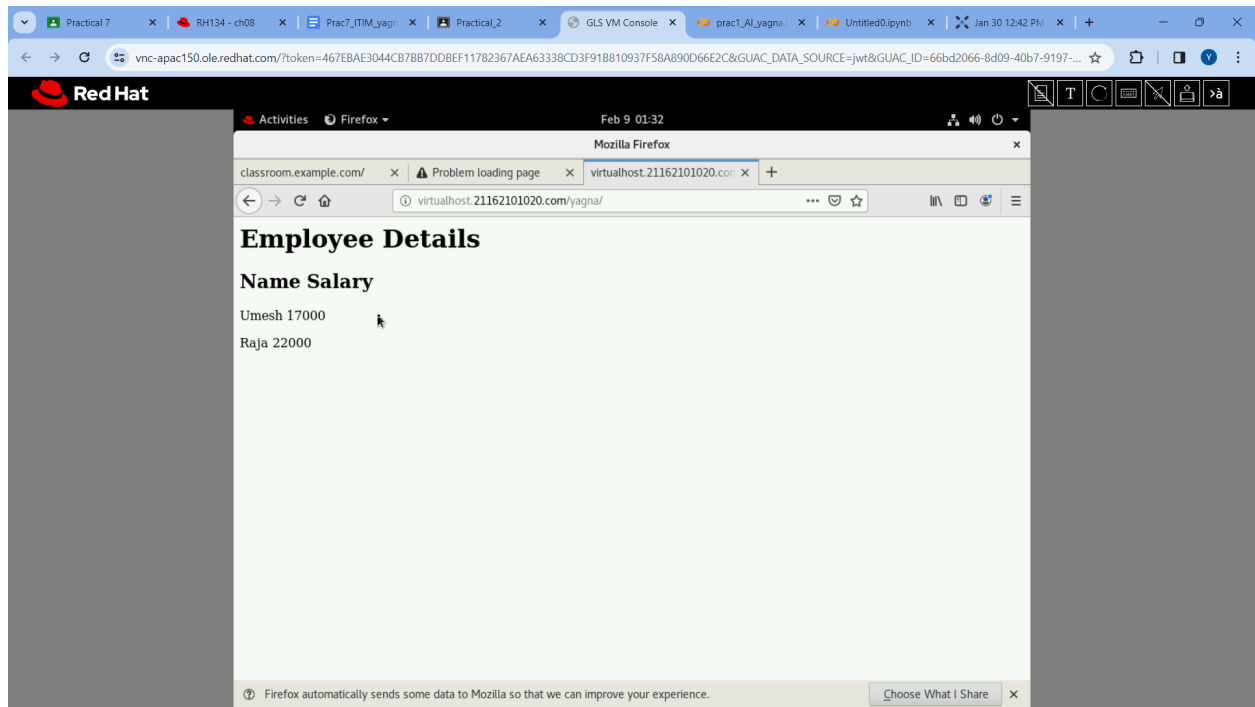
htpasswd is used to manage user files -c used to create file

/etc/httpd/userpassword is path where the username and encrypted passwords are stored

Yagna is the name of the user

Restart the httpd service using **service httpd restart** and try to access the dir through browser





2) Implement a website for <http://enrolmentnumber.yourname.com/group>. Create a directory "groupauth" under the document root used for the website. The webpage should say "Welcome to the group and now you can access the site".

The webpage must be configured for the group-based authentication and require users to login. Users "Jimmy" and "Emma" who belong to group operations should be able to access the share with password.

Make dir. **groupauth** inside the html folder using **mkdir ../groupauth**.

Now make another dir inside groupauth with similar name to our website path component i.e. **group** and add the required details inside the index.html file

Adding a index.html using **echo "welcome to the group now you can access the site" > ../groupauth/group/index.html** inside yagna which will be shown on browser

```
[root@workstation /]# mkdir /var/www/html/groupauth
[root@workstation /]# mkdir /var/www/html/groupauth/group
[root@workstation /]# echo "welcome to the group now you can access the site" >
/var/www/html/groupauth/group/index.html
[root@workstation /]# cat /var/www/html/groupauth/group/index.html
welcome to the group now you can access the site
```

Open **/etc/httpd/conf/httpd.conf** file and write the following configuration :

NameVirtualHost 172.25.250.9 //ip for virtual host

<VirtualHost 172.25.250.9>

DocumentRoot /var/www/html/groupauth //path to root directory

ServerName 21162101020.yagna.com //domain name

</VirtualHost>

<Directory '/var/www/html/groupauth'>

AuthType Basic //basic authentication type with username and password

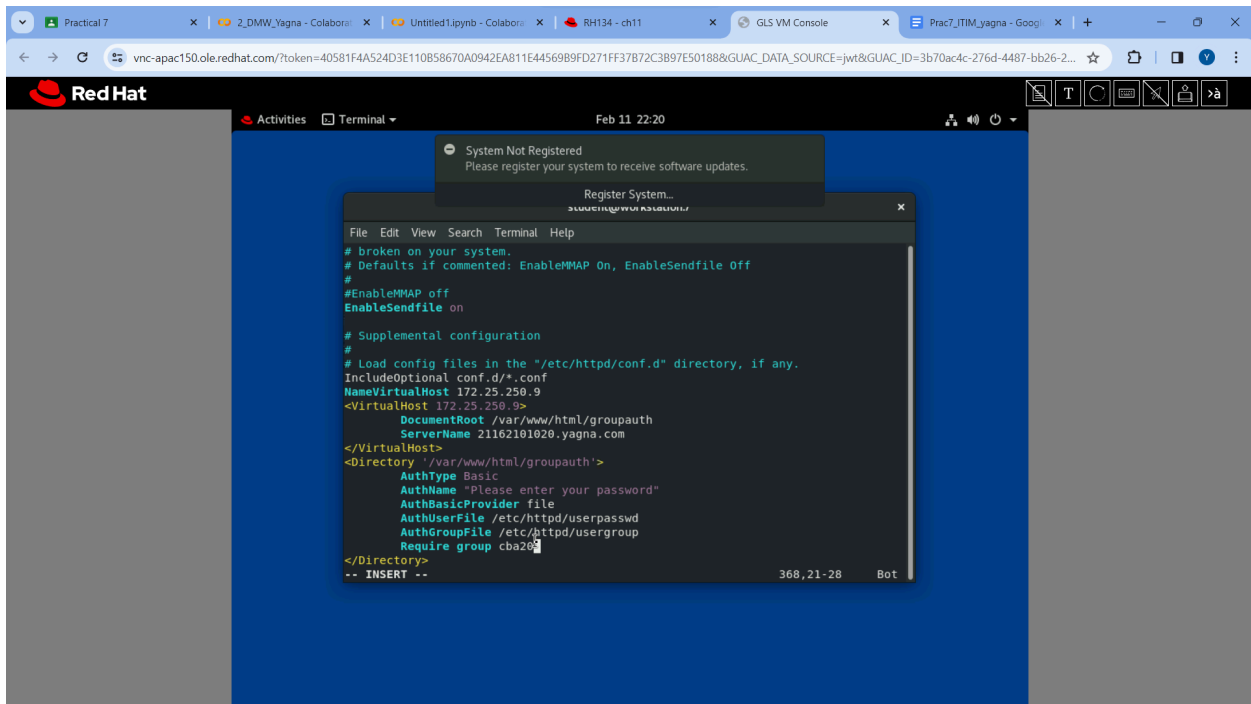
AuthName "Please enter the password" //text to show when authenticating

AuthBasicProvider file //checking credentials through file

AuthGroupFile **/etc/httpd/usergroup** //file where credentials are stored

Require group **cba20** //name of the group which can have access

</Directory>



Add authentication configuration written in **httpd.conf** file to **/rootdir-path/.htaccess**

```
[root@workstation /]# vim /etc/httpd/conf/httpd.conf
[root@workstation /]# vim /var/www/html/groupauth/.htaccess
[root@workstation /]# cat /var/www/html/groupauth/.htaccess
    AuthType Basic
    AuthName "Please enter your password"
    AuthBasicProvider file
    AuthUserFile /etc/httpd/userpasswd
    AuthGroupFile /etc/httpd/usergroup
    Require group cba20

[root@workstation /]#
```

Adding the ip, domain name in `/etc/hosts` file : **172.25.250.9 21162101020.yagna.com**

```
[root@workstation /]# vim /etc/hosts
[root@workstation /]# cat /etc/hosts
127.0.0.1    localhost localhost.localdomain localhost4 localhost4.localdomain4
::1        localhost localhost.localdomain localhost6 localhost6.localdomain6

172.25.254.254  classroom.example.com classroom
172.25.254.254  content.example.com content
172.25.254.254  materials.example.com materials
### rht-vm-hosts file listing the entries to be appended to /etc/hosts
172.25.250.9    21162101020.yagna.com
172.25.250.9    workstation.lab.example.com workstation
172.25.250.10   servera.lab.example.com servera
172.25.250.11   serverb.lab.example.com serverb
172.25.250.254  bastion.lab.example.com bastion
172.25.250.220  utility.lab.example.com utility
172.25.250.220  registry.lab.example.com registry

[root@workstation /]#
```

Making 2 users name Jimmy and Emma and adding them to usergroup file at `/etc/httpd/userpasswd` and adding them to group `/etc/httpd/usergroup` with the groupname : **cba20 Jimmy Emma**

```
[root@workstation /]# htpasswd -c /etc/httpd/userpasswd Jimmy
New password:
Re-type new password:
Adding password for user Jimmy
[root@workstation /]# htpasswd /etc/httpd/userpasswd Emma
New password:
Re-type new password:
Adding password for user Emma
```

```
[root@workstation /]# vim /etc/httpd/usergroup
[root@workstation /]# cat /etc/httpd/usergroup
cba20: Jimmy Emma
[root@workstation /]#
```

Now restart the httpd service using **service httpd restart** and check if the directory is accessible through virtual host

