

ITIM

PRACTICAL - 8

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Batch : 61(CBA)

Tasks :

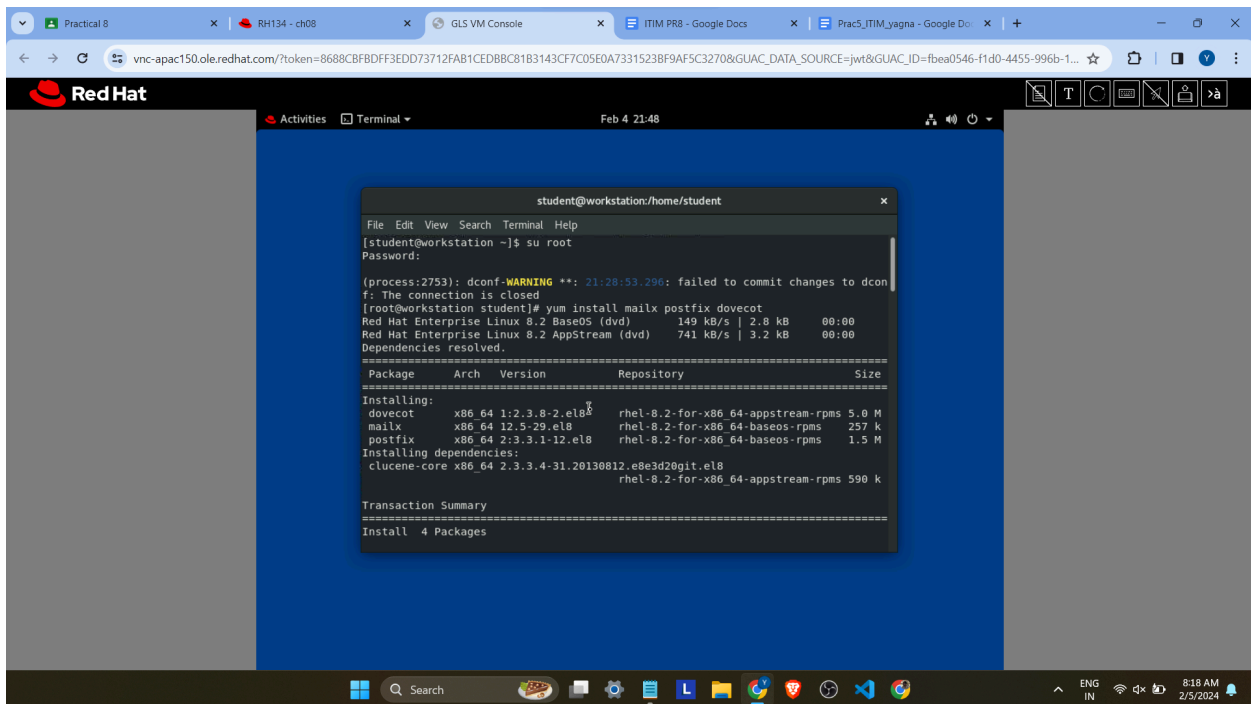
Configure the Postfix Package to send and receive mail for domain - ganpatuniversity.Yourname.edu.

Ensure that users are able to send and receive the mail.

Steps :

First we install require services which are **mailx** , **postfix** , **dovecot** so we will install all these service with

command : `yum install mailx postfix dovecot`



The screenshot shows a terminal window titled "student@workstation:/home/student" with a Red Hat logo in the top left. The terminal output shows the user switching to root and running the command `yum install mailx postfix dovecot`. The output includes a warning about dconf, a list of packages to be installed, and a transaction summary.

```
student@workstation:/home/student
File Edit View Search Terminal Help
[student@workstation ~]$ su root
Password:
(process:2753): dconf-WARNING **: 21:28:53.296: failed to commit changes to dconf: The connection is closed
[root@workstation student]# yum install mailx postfix dovecot
Red Hat Enterprise Linux 8.2 BaseOS (dvd) 149 kB/s | 2.8 kB 00:00
Red Hat Enterprise Linux 8.2 AppStream (dvd) 741 kB/s | 3.2 kB 00:00
Dependencies resolved.
=====
Package Arch Version Repository Size
=====
Installing:
dovecot x86_64 1:2.3.8-2.el8 rhel-8.2-for-x86_64-appstream-rpms 5.0 M
mailx x86_64 12.5-29.el8 rhel-8.2-for-x86_64-baseos-rpms 257 k
postfix x86_64 2:3.3.1-12.el8 rhel-8.2-for-x86_64-baseos-rpms 1.5 M
Installing dependencies:
clucene-core x86_64 2.3.3.4-31.20130812.e8e3d20git.el8 rhel-8.2-for-x86_64-appstream-rpms 590 k
=====
Transaction Summary
=====
Install 4 Packages
```

Now Enable the services using

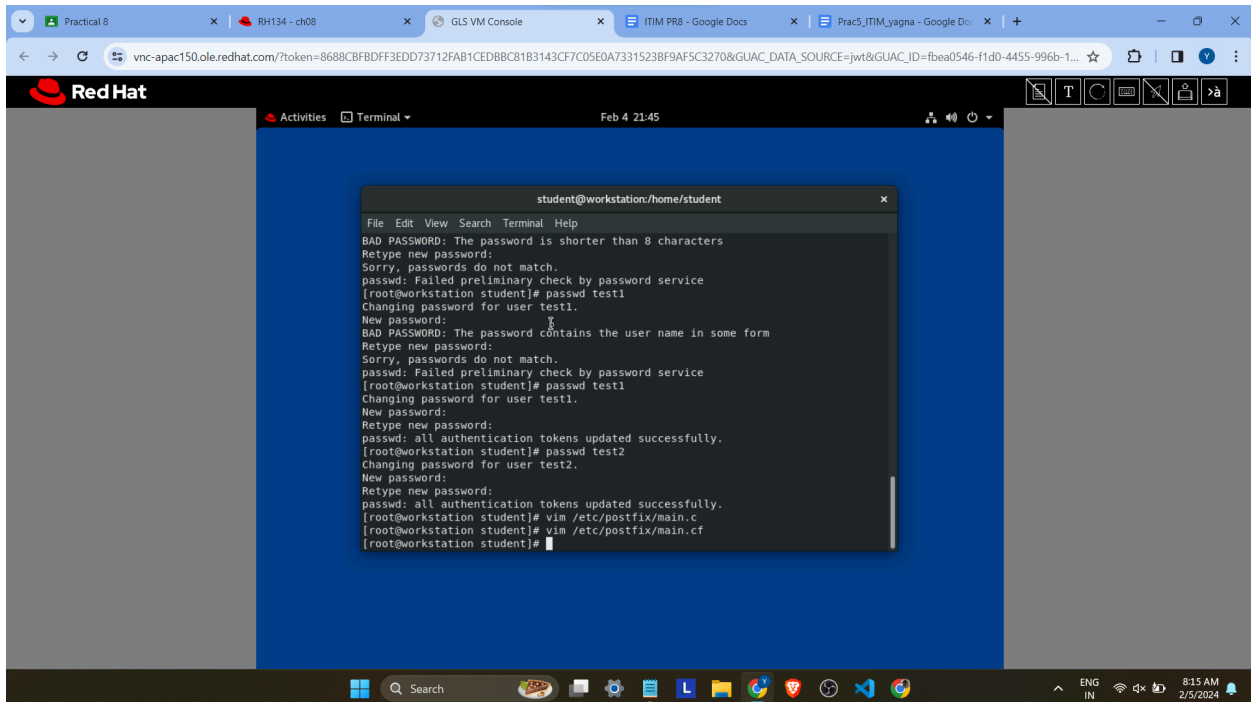
Systemctl start postfix.start & systemctl start dovecot.start

```
[root@workstation student]# systemctl enable postfix.service
Created symlink /etc/systemd/system/multi-user.target.wants/postfix.service → /usr/lib/systemd/system/postfix.service.
```

```
[root@workstation student]# systemctl enable dovecot.service
Created symlink /etc/systemd/system/multi-user.target.wants/dovecot.service → /usr/lib/systemd/system/dovecot.service.
```

Create 2 users test1 and test 2 using **useradd test1** & **useradd test2**

Then give them password using **passwd test1** & **passwd test2**

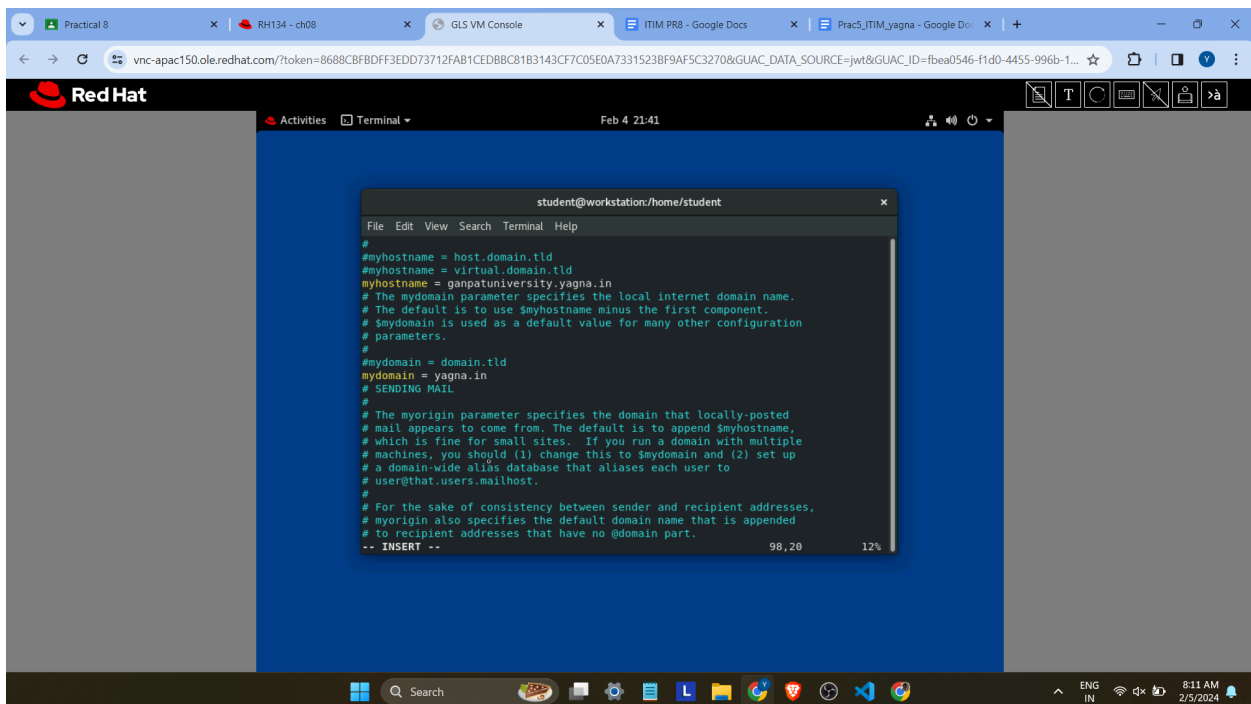


The screenshot shows a Red Hat virtual machine interface. The terminal window is titled 'student@workstation:/home/student'. It displays the following commands and output:

```
File Edit View Search Terminal Help
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
passwd: Failed preliminary check by password service
[root@workstation student]# passwd test1
Changing password for user test1.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
Sorry, passwords do not match.
passwd: Failed preliminary check by password service
[root@workstation student]# passwd test1
Changing password for user test1.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@workstation student]# passwd test2
Changing password for user test2.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@workstation student]# vim /etc/postfix/main.c
[root@workstation student]# vim /etc/postfix/main.cf
[root@workstation student]#
```

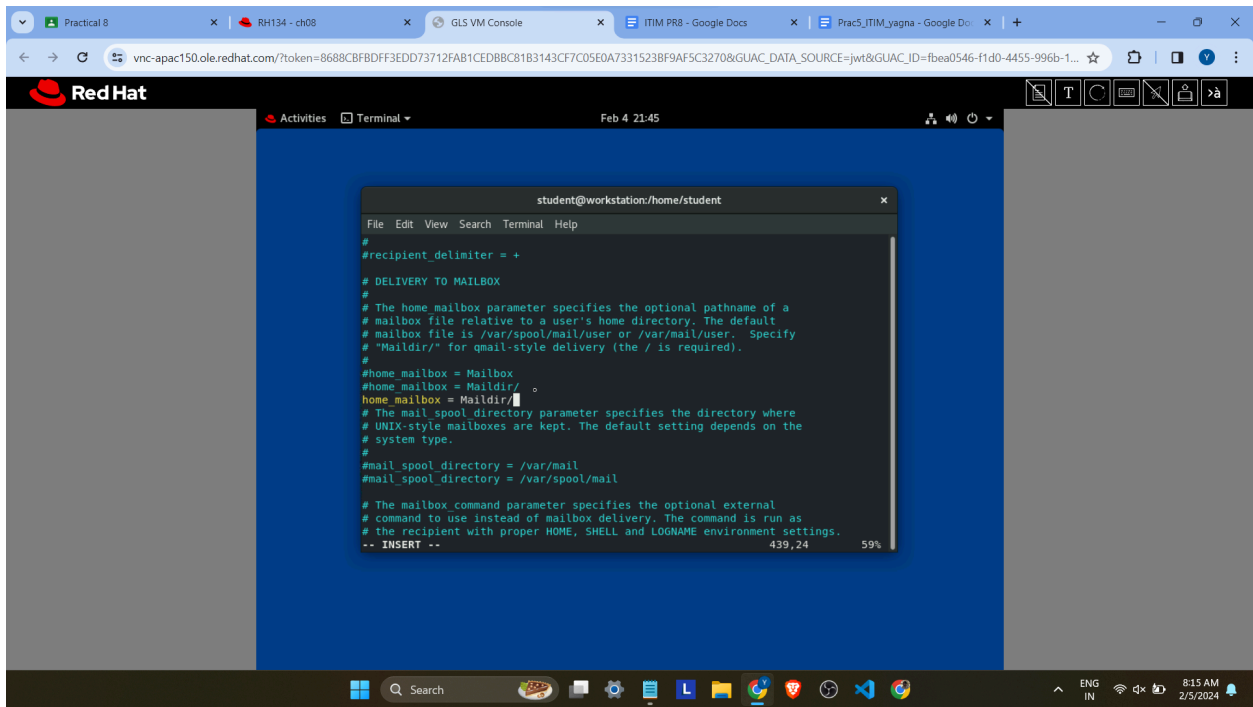
Now go into `/etc/postfix/main.cf` file using `vim /etc/postfix/main.cf`

Then give the hostname using `myhostname = ganpatuniversity.yagna.in`, domain using `mydomain = yagna.in` and a directory to store mail using `home_mailbox = Maildir/`



The screenshot shows a Red Hat VM console window. The terminal displays the configuration of the `/etc/postfix/main.cf` file. The configuration includes setting `myhostname` to `ganpatuniversity.yagna.in`, `mydomain` to `yagna.in`, and `home_mailbox` to `Maildir/`. The terminal output is as follows:

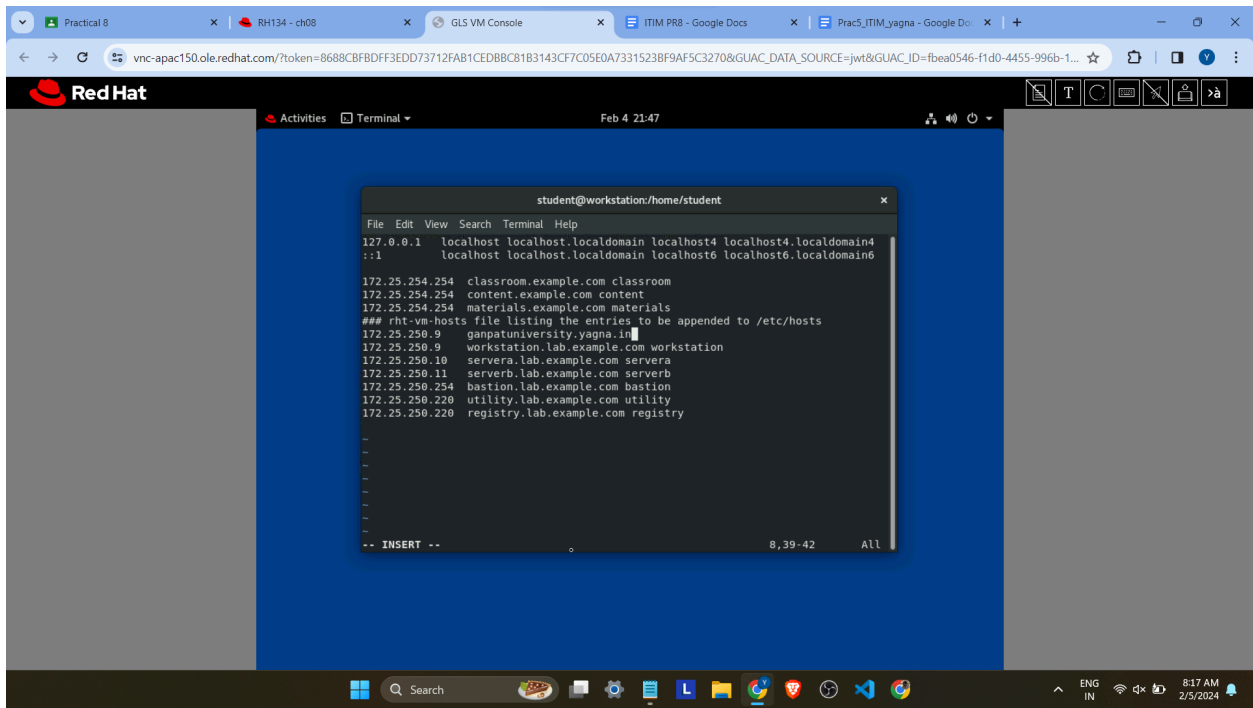
```
student@workstation:/home/student
File Edit View Search Terminal Help
#
#myhostname = host.domain.tld
#myhostname = virtual.domain.tld
myhostname = ganpatuniversity.yagna.in
# The mydomain parameter specifies the local internet domain name.
# The default is to use $myhostname minus the first component.
# $mydomain is used as a default value for many other configuration
# parameters.
#
#mydomain = domain.tld
mydomain = yagna.in
# SENDING MAIL
#
# The myorigin parameter specifies the domain that locally-posted
# mail appears to come from. The default is to append $myhostname,
# which is fine for small sites. If you run a domain with multiple
# machines, you should (1) change this to $mydomain and (2) set up
# a domain-wide alias database that aliases each user to
# user@that.users.mailhost.
#
# For the sake of consistency between sender and recipient addresses,
# myorigin also specifies the default domain name that is appended
# to recipient addresses that have no @domain part.
-- INSERT --
```



The screenshot shows a Red Hat VM console with a terminal window open. The terminal displays the following configuration for mail delivery:

```
student@workstation:/home/student
#recipient_delimiter = +
# DELIVERY TO MAILBOX
# The home_mailbox parameter specifies the optional pathname of a
# mailbox file relative to a user's home directory. The default
# mailbox file is /var/spool/mail/user or /var/mail/user. Specify
# "Maildir/" for qmail-style delivery (the / is required).
#
#home_mailbox = Mailbox
#home_mailbox = Maildir/
home_mailbox = Maildir/
# The mail_spool_directory parameter specifies the directory where
# UNIX-style mailboxes are kept. The default setting depends on the
# system type.
#
#mail_spool_directory = /var/mail
#mail_spool_directory = /var/spool/mail
# The mailbox_command parameter specifies the optional external
# command to use instead of mailbox delivery. The command is run as
# the recipient with proper HOME, SHELL and LOGNAME environment settings.
-- INSERT --
```

Now open hosts using **vim /etc/hosts** and give your ip and hostname
172.25.250.9 ganpatuniversity.yagna.in and save the file



The screenshot shows the same Red Hat VM console with the terminal window displaying the contents of the /etc/hosts file:

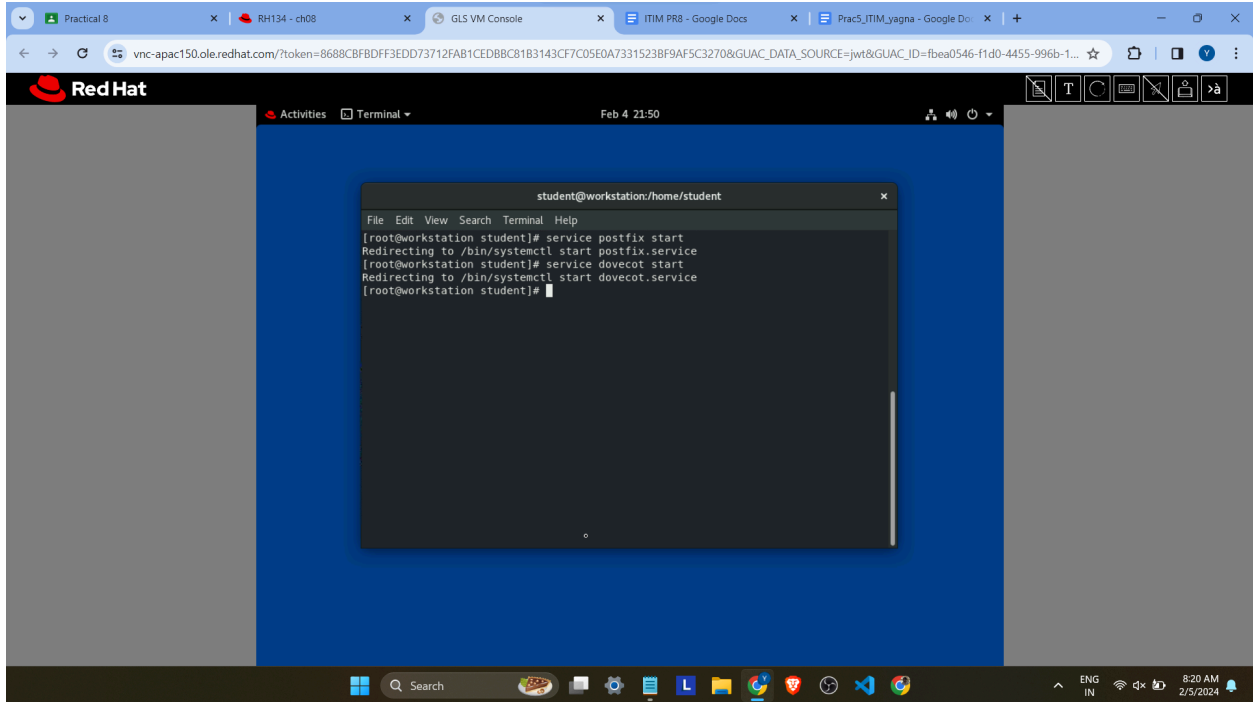
```
student@workstation:/home/student
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost localhost.localdomain localhost6 localhost6.localdomain6

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 ganpatuniversity.yagna.in
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

-- INSERT --
```

Start the postfix and dovecot using

Service postfix start & service dovecot start

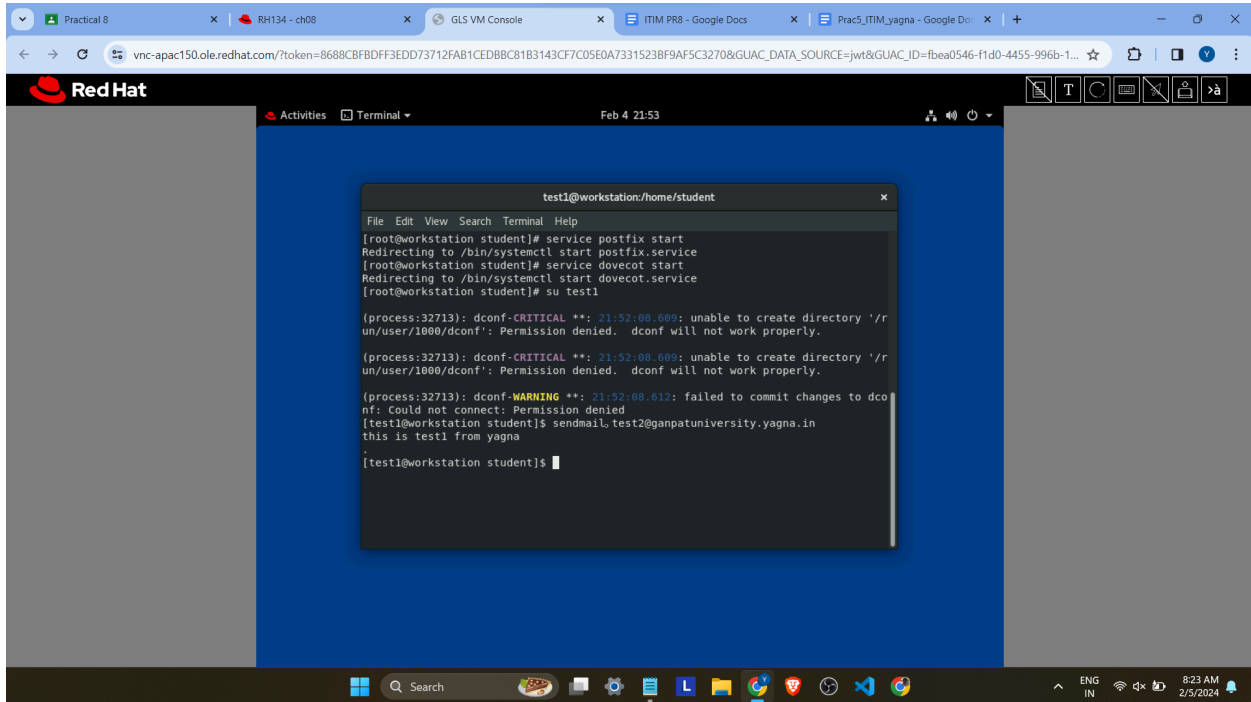


The screenshot shows a Red Hat workstation environment. A terminal window is open, displaying the following commands and output:

```
student@workstation:/home/student
File Edit View Search Terminal Help
[root@workstation student]# service postfix start
Redirecting to /bin/systemctl start postfix.service
[root@workstation student]# service dovecot start
Redirecting to /bin/systemctl start dovecot.service
[root@workstation student]#
```

The terminal window is titled "student@workstation:/home/student". The background of the workstation is a blue desktop with a taskbar at the bottom showing various application icons and system status indicators. The top of the window shows a browser tab with the URL "vnc-apac150.ole.redhat.com/".

Now login to another user using **su test1** and send the mail using **sendmail test2@ganpatuniversity.yagna.in**



The screenshot shows a Red Hat VM console window. The terminal displays the following commands and output:

```
test1@workstation:/home/student
File Edit View Search Terminal Help
[root@workstation student]# service postfix start
Redirecting to /bin/systemctl start postfix.service
[root@workstation student]# service dovecot start
Redirecting to /bin/systemctl start dovecot.service
[root@workstation student]# su test1

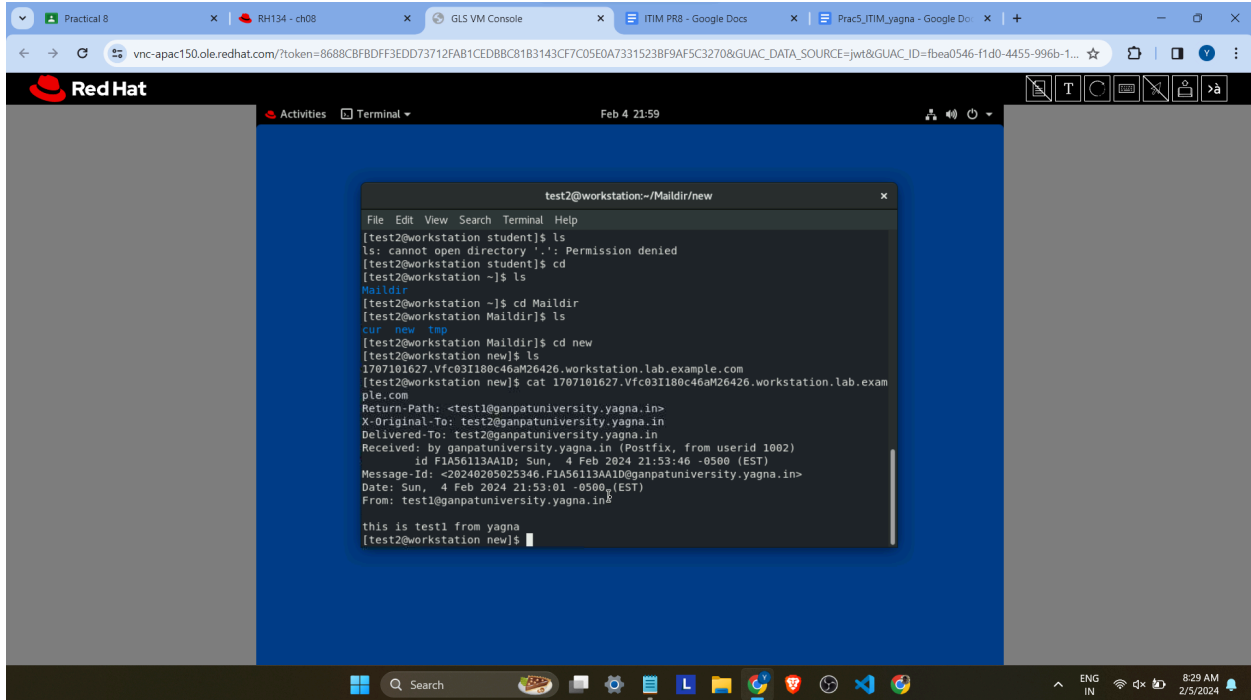
(process:32713): dconf-CRITICAL **: 21:52:08.609: unable to create directory '/run/user/1000/dconf': Permission denied. dconf will not work properly.

(process:32713): dconf-CRITICAL **: 21:52:08.609: unable to create directory '/run/user/1000/dconf': Permission denied. dconf will not work properly.

(process:32713): dconf-WARNING **: 21:52:08.612: failed to commit changes to dconf: Could not connect: Permission denied
[test1@workstation student]$ sendmail test2@ganpatuniversity.yagna.in
this is test1 from yagna
.
[test1@workstation student]$
```

The console window has a Red Hat logo in the top left and a system tray at the bottom showing the date and time as 8:23 AM 2/5/2024.

Now login to the receiver using **su test2** go into the **Maildir/new** and do **ls** to get the name given to the file inside and **cat file_name** that file to check the text inside



```
test2@workstation:~/Maildir/new
File Edit View Search Terminal Help
[test2@workstation student]$ ls
ls: cannot open directory '.': Permission denied
[test2@workstation student]$ cd
[test2@workstation ~]$ ls
Maildir
[test2@workstation ~]$ cd Maildir
[test2@workstation Maildir]$ ls
cur new tmp
[test2@workstation Maildir]$ cd new
[test2@workstation new]$ ls
1707101627.Vfc031180c46aM26426.workstation.lab.example.com
[test2@workstation new]$ cat 1707101627.Vfc031180c46aM26426.workstation.lab.example.com
Return-Path: <test1@ganpatuniversity.yagna.in>
X-Original-To: test2@ganpatuniversity.yagna.in
Delivered-To: test2@ganpatuniversity.yagna.in
Received: by ganpatuniversity.yagna.in (Postfix, from userid 1002)
        id F1A56113AA1D; Sun,  4 Feb 2024 21:53:46 -0500 (EST)
Message-Id: <20240209025346.F1A56113AA1D@ganpatuniversity.yagna.in>
Date: Sun,  4 Feb 2024 21:53:01 -0500 (EST)
From: test1@ganpatuniversity.yagna.in

this is test1 from yagna
[test2@workstation new]$
```