

Admin 2

Lab 1

1. Use systemctl to view the status of all the system services.

Sudo systemctl

```
malayasser@localhost:~$ sudo systemctl
UNIT                                LOAD    ACTIVE SUB    DESCRIPTION
proc-sys-fs-binfmt-misc-automount loaded active waiting Arbitrary Executable File Formats File System Automount Point
sys-devices-pci0000:00-0000:00:02:0-drm-card1-card1V2de0Pv2d1-intel-backlight.device loaded active plugged /sys/devices/pci0000:00/0000:00:02:0/drm/card1/card1-eDP-1/intel_backlight
sys-devices-pci0000:00-0000:00:03:0-sound-card0.device loaded active plugged Xeon E3-12200 v5/4th Gen Core Processor HD Audio Controller
sys-devices-pci0000:00-0000:00:14:0-usb3-3x2d9-3x2d9:1.0-bluetooth-hci0.device loaded active plugged /sys/devices/pci0000:00/0000:00:14:0/usb3/3-9/3-9:1.0/bluetooth/hci0
sys-devices-pci0000:00-0000:00:1b:0-sound-card1.device loaded active plugged 8 Series/C220 Series Chipset High Definition Audio Controller
sys-devices-pci0000:00-0000:00:1c:2-0000:00:00:0-net-wlp6s0.device loaded active plugged Wireless 7260 (Dual Band Wireless-AC 7260)
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda1.device loaded active plugged CT240BX5005SD1 System Reserved
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda2.device loaded active plugged CT240BX5005SD1 2
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda3.device loaded active plugged CT240BX5005SD1 3
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda4.device loaded active plugged CT240BX5005SD1 4
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda5.device loaded active plugged CT240BX5005SD1 5
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda6.device loaded active plugged CT240BX5005SD1 6
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda-sda7.device loaded active plugged CT240BX5005SD1 7
sys-devices-pci0000:00-0000:00:1f:2-ata1-host0-target0:0:0:0:0-block-sda.device loaded active plugged CT240BX5005SD1
sys-devices-platform-dellVx2d1laptop-leds-dell::kbd-backlight.device loaded active plugged /sys/devices/platform/dell-laptop/leds/dell::kbd_backlight
sys-devices-platform-serial8250-tty-ttyS0.device loaded active plugged /sys/devices/platform/serial8250/tty/ttyS0
sys-devices-platform-serial8250-tty-ttyS1.device loaded active plugged /sys/devices/platform/serial8250/tty/ttyS1
sys-devices-platform-serial8250-tty-ttyS2.device loaded active plugged /sys/devices/platform/serial8250/tty/ttyS2
sys-devices-platform-serial8250-tty-ttyS3.device loaded active plugged /sys/devices/platform/serial8250/tty/ttyS3
sys-devices-virtual-block-dmVx2d1.device loaded active plugged /sys/devices/virtual/block/dm-0
sys-devices-virtual-block-dmVx2d2.device loaded active plugged /sys/devices/virtual/block/dm-2
sys-devices-virtual-net-virbr0-virbr0.device loaded active plugged /sys/devices/virtual/net/virbr0
sys-devices-virtual-net-virbr0-virbr0-nic.device loaded active plugged /sys/devices/virtual/net/virbr0-nic
sys-module-configfs.device loaded active plugged /sys/module/configfs
sys-module-fuse.device loaded active plugged /sys/module/fuse
sys-subsystem-bluetooth-devices-hci0.device loaded active plugged /sys/subsystem/bluetooth/devices/hci0
sys-subsystem-net-devices-virbr0.device loaded active plugged /sys/subsystem/net/devices/virbr0
sys-subsystem-net-devices-virbr0-virbr0-nic.device loaded active plugged /sys/subsystem/net/devices/virbr0-nic
sys-subsystem-net-devices-wlp6s0.device loaded active plugged Wireless 7260 (Dual Band Wireless-AC 7260)
-.mount loaded active mounted Root Mount
boot-efi.mount loaded active mounted /boot/efi
boot.mount loaded active mounted /boot
dev-hugepages.mount loaded active mounted Huge Pages File System
dev-mqueue.mount loaded active mounted POSIX Message Queue File System
home.mount loaded active mounted /home
run-user-1000-gvfs.mount loaded active mounted /run/user/1000/gvfs
run-user-1000.mount loaded active mounted /run/user/1000
sys-fs-fuse-connections.mount loaded active mounted FUSE Control File System
sys-kernel-config.mount loaded active mounted Kernel Configuration File System
sys-kernel-debug.mount loaded active mounted Kernel Debug File System
sys-kernel-tracing.mount loaded active mounted /sys/kernel/tracing
var-lib-nfs-rpc-pipefs.mount loaded active mounted rpc Pipe File System
cups.path loaded active running CUPS Scheduler
systemd-ask-password-plymouth.path loaded active waiting Forward Password Requests to Plymouth Directory Watch
systemd-ask-password-wall.path loaded active waiting Forward Password Requests to Wall Directory Watch
init.scope loaded active running System and Service Manager
session-2.scope loaded active running Session 2 of user malayasser
accounts-daemon.service loaded active running Accounts Service
alsa-state.service loaded active running Manage Sound Card State (restore and store)
atd.service loaded active running Job spooling tools
```

2. Change the default run level back to multi-user.target and reboot.

Sudo systemctl set-default multi-user.target

Sudo systemctl set-default reboot.target

3. Send mail to the root user.

Mailx root < email.txt

```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
Dec 07 14:47:36 localhost.localdomain restorecon[64737]: /usr/sbin/restorecon: >  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: alias database /etc/alia>  
Dec 07 14:47:37 localhost.localdomain aliasesdb[64746]: /etc/aliases: 77 aliase>  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: /etc/aliases: 77 aliases>  
Dec 07 14:47:37 localhost.localdomain postfix/master[64822]: daemon started -->  
Dec 07 14:47:37 localhost.localdomain systemd[1]: Started Postfix Mail Transpor>  
[maiyasser@localhost ~]$ ls  
bash2      docs      error      lab2      lol      output    Templates  
Commands  Documents filename1  lab21     Music    Pictures  test  
Desktop    Downloads filename2  lab2_1.sh myteam   Public    test1  
dirtest    email.txt fileusernames lab3      oldpasswd result     Videos  
[maiyasser@localhost ~]$ mailx root < email.txt  
[maiyasser@localhost ~]$ sudo cat /var/mail/root  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
cat: /var/mail/root: No such file or directory  
You have new mail in /var/spool/mail/maiyasser  
[maiyasser@localhost ~]$ echo $XDG_CURRENT_DESKTOP  
GNOME  
[maiyasser@localhost ~]$
```

4. Verify that you have received this mail.

Sudo cat /var/mail/root

```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
Dec 07 14:47:36 localhost.localdomain restorecon[64737]: /usr/sbin/restorecon: >  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: alias database /etc/alia>  
Dec 07 14:47:37 localhost.localdomain aliasesdb[64746]: /etc/aliases: 77 aliase>  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: /etc/aliases: 77 aliases>  
Dec 07 14:47:37 localhost.localdomain postfix/master[64822]: daemon started -->  
Dec 07 14:47:37 localhost.localdomain systemd[1]: Started Postfix Mail Transpor>  
[maiyasser@localhost ~]$ ls  
bash2      docs      error      lab2      lol      output    Templates  
Commands  Documents filename1  lab21     Music    Pictures  test  
Desktop    Downloads filename2  lab2_1.sh myteam   Public    test1  
dirtest    email.txt fileusernames lab3      oldpasswd result     Videos  
[maiyasser@localhost ~]$ mailx root < email.txt  
[maiyasser@localhost ~]$ sudo cat /var/mail/root  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
cat: /var/mail/root: No such file or directory  
You have new mail in /var/spool/mail/maiyasser  
[maiyasser@localhost ~]$ echo $XDG_CURRENT_DESKTOP  
GNOME  
[maiyasser@localhost ~]$
```

5. Use systemctl utility to stop postfix service

```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@192 ~]$ systemctl stop postfix  
[maiyasser@192 ~]$
```

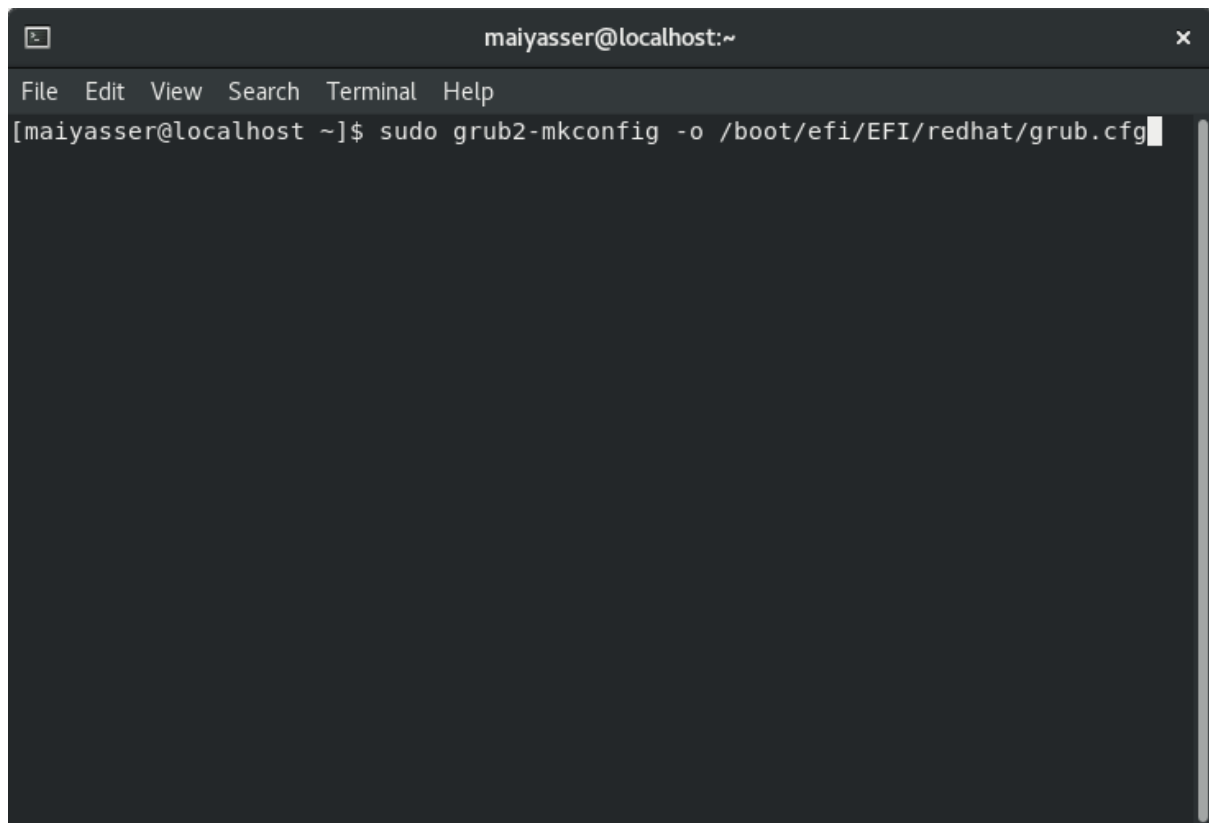
6. Send mail again to the root user.

```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
Dec 07 14:47:36 localhost.localdomain restorecon[64737]: /usr/sbin/restorecon: >  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: alias database /etc/alia>  
Dec 07 14:47:37 localhost.localdomain aliasesdb[64746]: /etc/aliases: 77 aliase>  
Dec 07 14:47:37 localhost.localdomain sendmail[64749]: /etc/aliases: 77 aliases>  
Dec 07 14:47:37 localhost.localdomain postfix/master[64822]: daemon started -->  
Dec 07 14:47:37 localhost.localdomain systemd[1]: Started Postfix Mail Transpor>  
[maiyasser@localhost ~]$ ls  
bash2      docs      error      lab2      lol      output    Templates  
Commands  Documents filename1  lab21    Music    Pictures  test  
Desktop    Downloads filename2  lab2_1.sh myteam   Public    test1  
dirtest    email.txt fileusernames lab3    oldpasswd result    Videos  
[maiyasser@localhost ~]$ mailx root < email.txt  
[maiyasser@localhost ~]$ sudo cat /var/mail/root  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
[sudo] password for maiyasser:  
Sorry, try again.  
[sudo] password for maiyasser:  
cat: /var/mail/root: No such file or directory  
You have new mail in /var/spool/mail/maiyasser  
[maiyasser@localhost ~]$ echo $XDG_CURRENT_DESKTOP  
GNOME  
[maiyasser@localhost ~]$
```

7. Verify that you have received this mail.

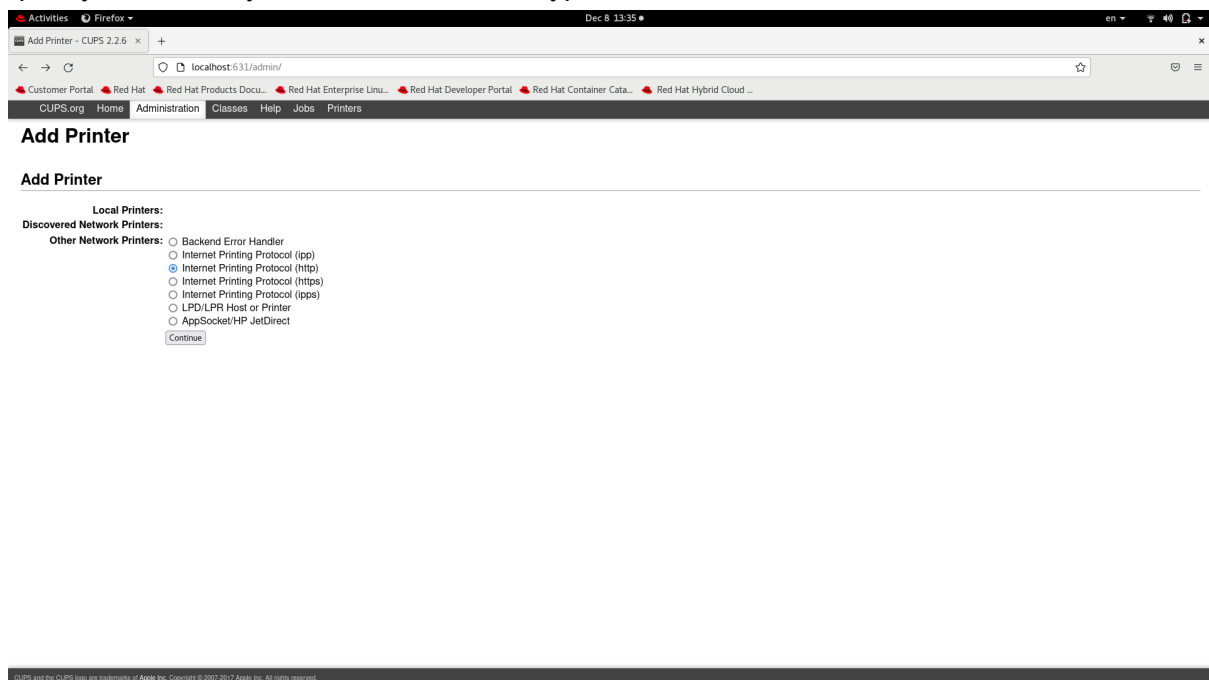
8. Use systemctl utility to start postfix service

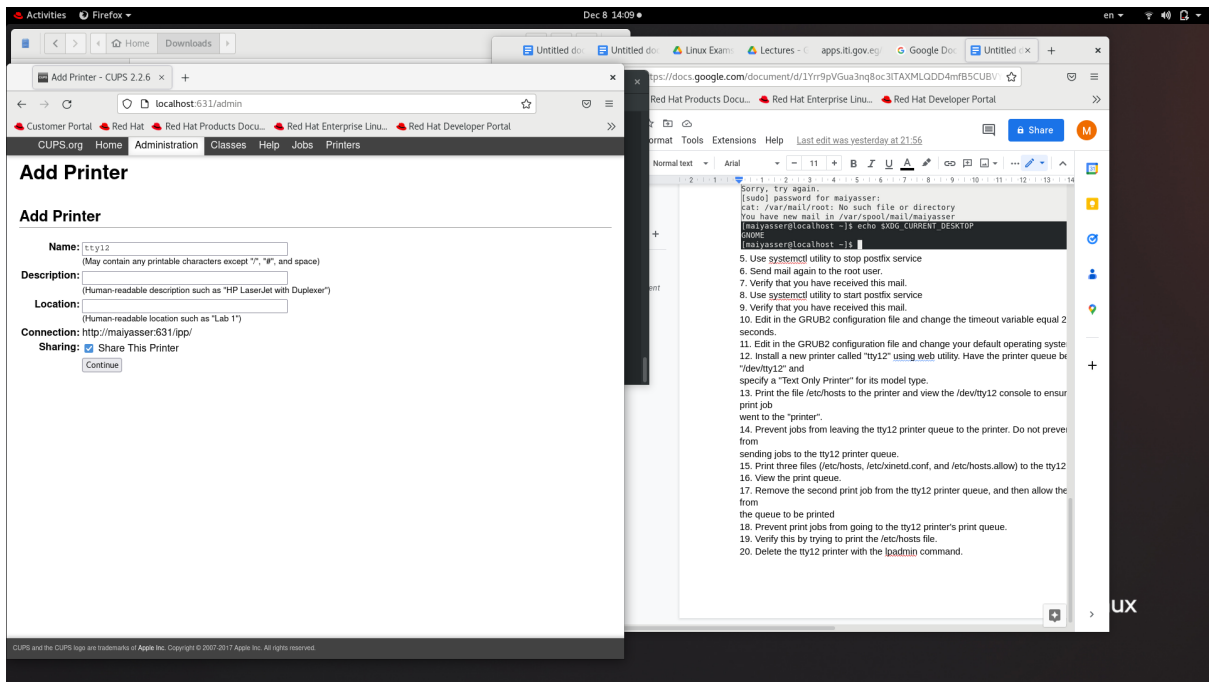
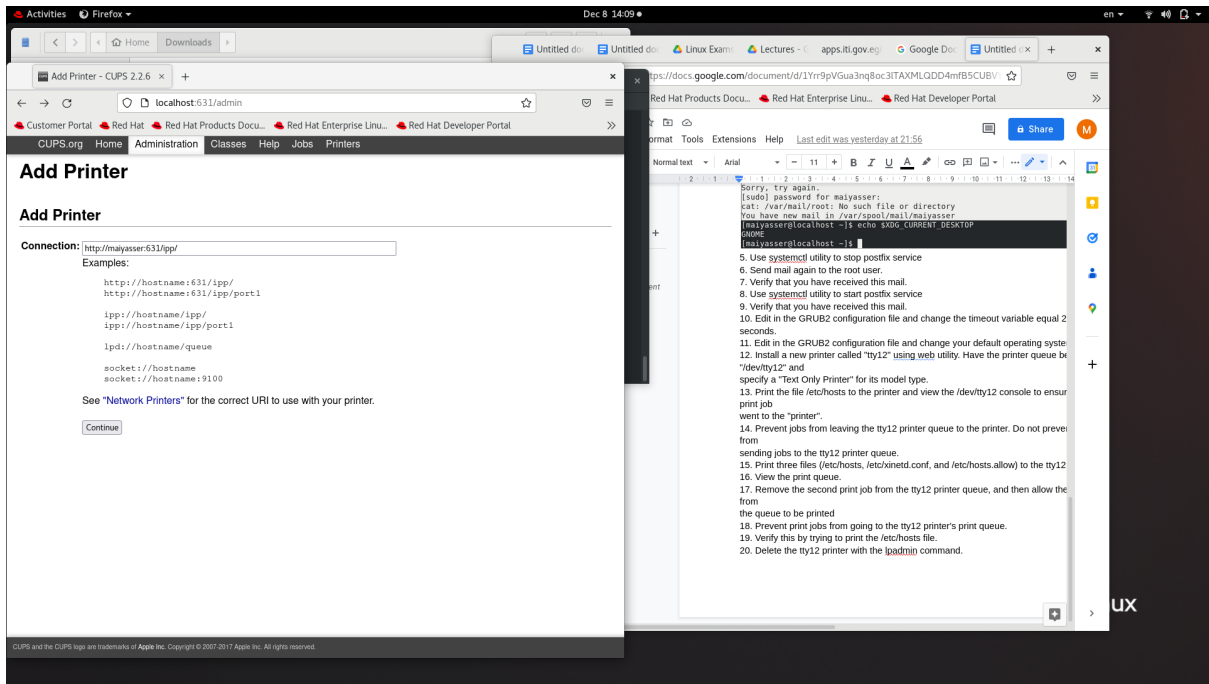
Systemctl start postfix

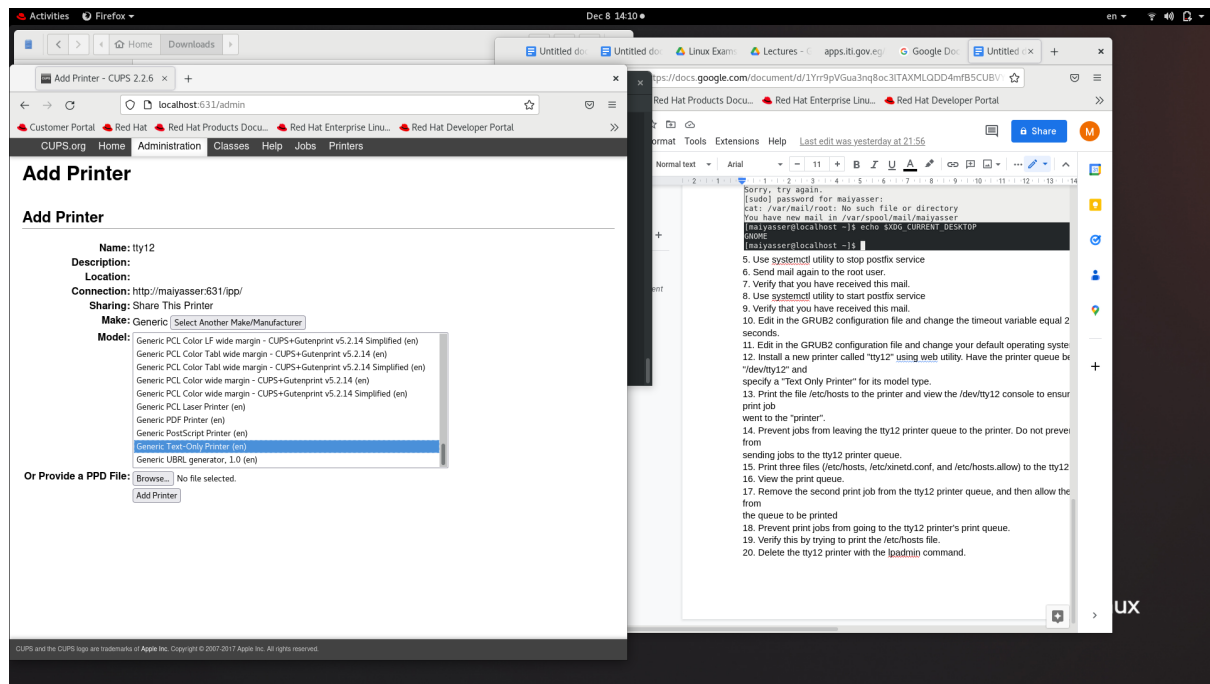


//11. Edit in the GRUB2 configuration file and change your default operating system

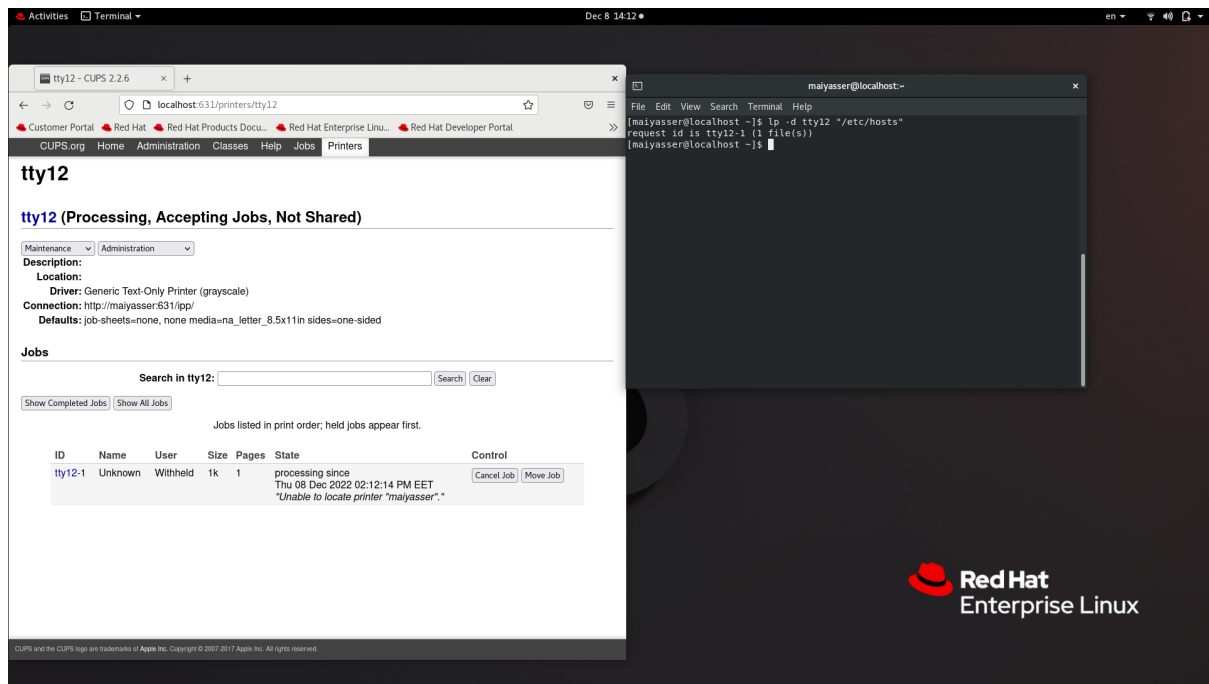
12. Install a new printer called "tty12" using web utility. Have the printer queue be "/dev/tty12" and specify a "Text Only Printer" for its model type.





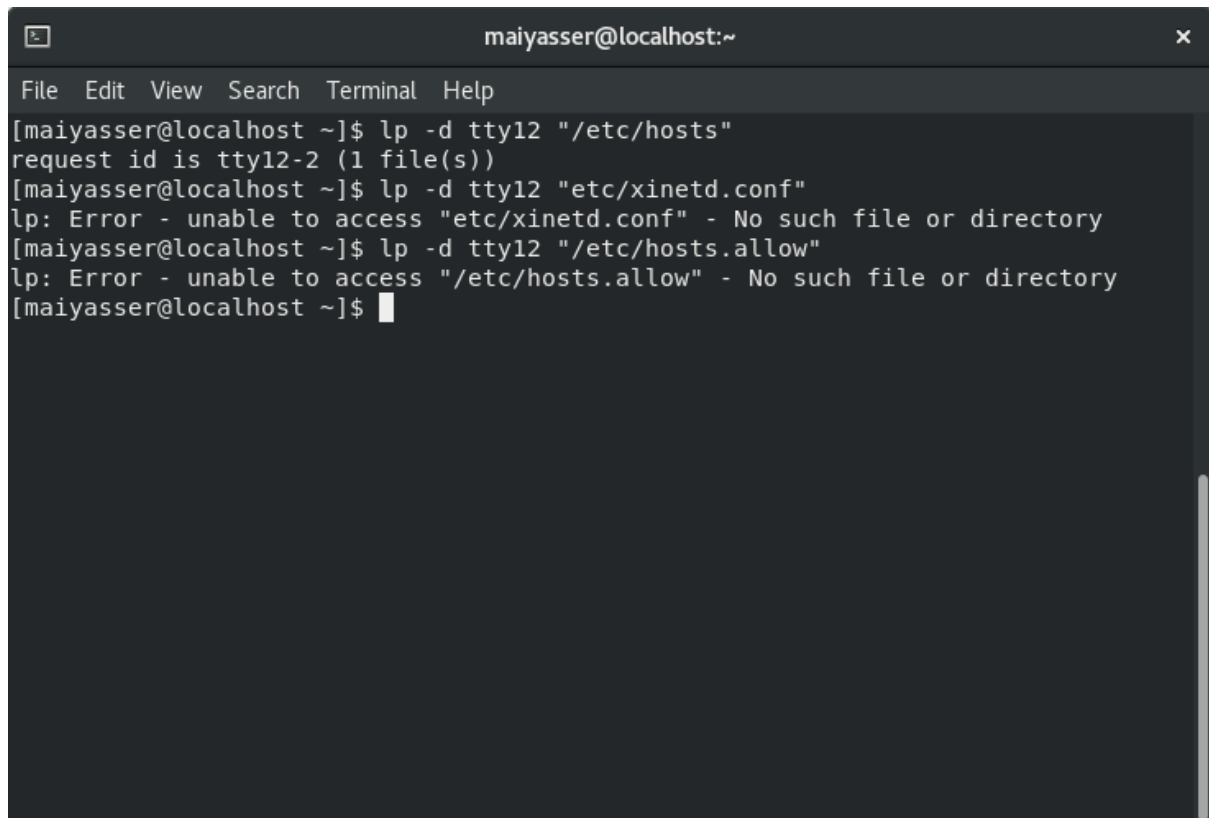


13. Print the file `/etc/hosts` to the printer and view the `/dev/tty12` console to ensure that the print job went to the "printer".

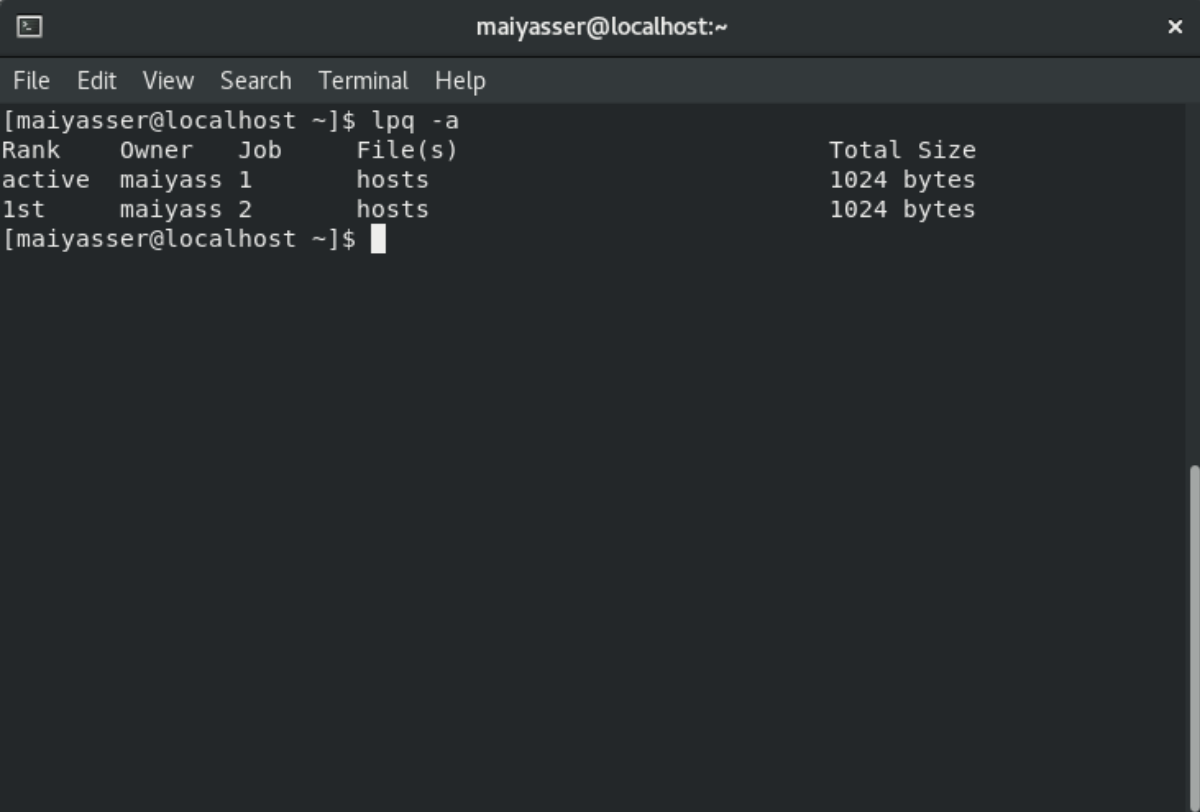


14. Prevent jobs from leaving the tty12 printer queue to the printer. Do not prevent users from sending jobs to the tty12 printer queue.
-cupsdisable

15. Print three files (/etc/hosts, /etc/xinetd.conf, and /etc/hosts.allow) to the tty12 printer

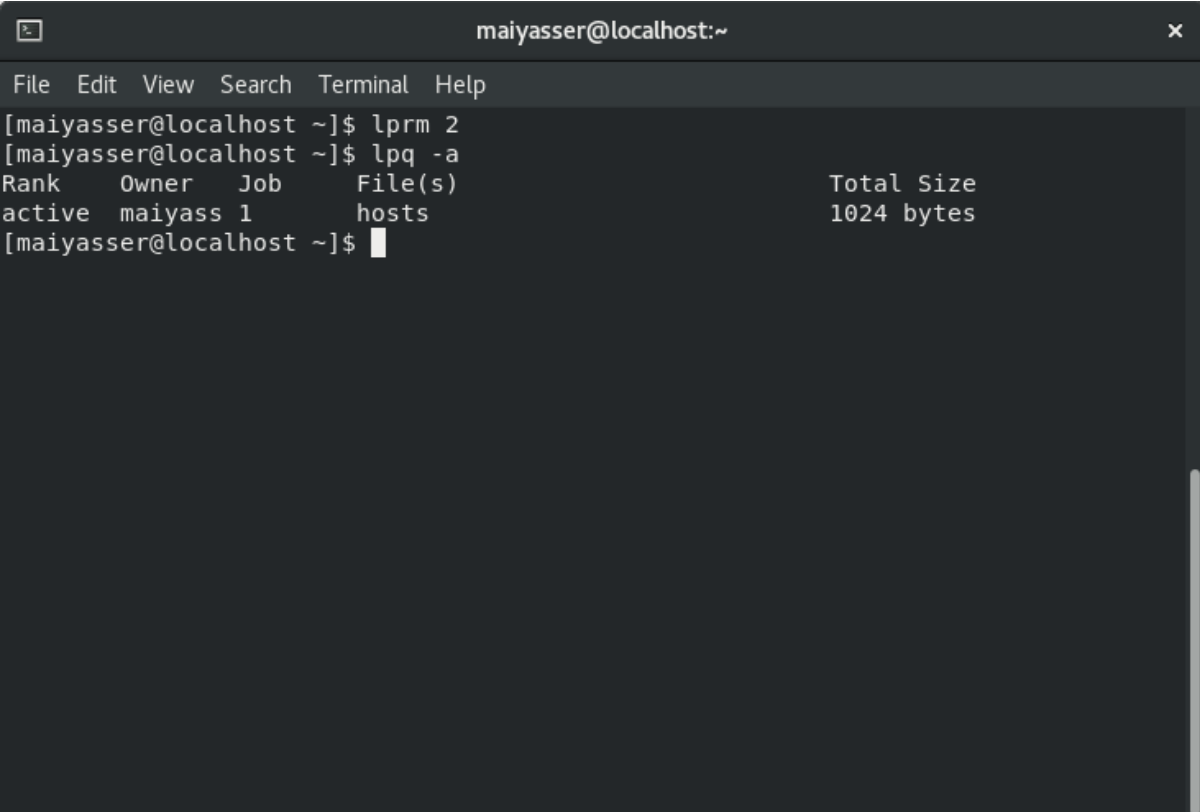


16. View the print queue.



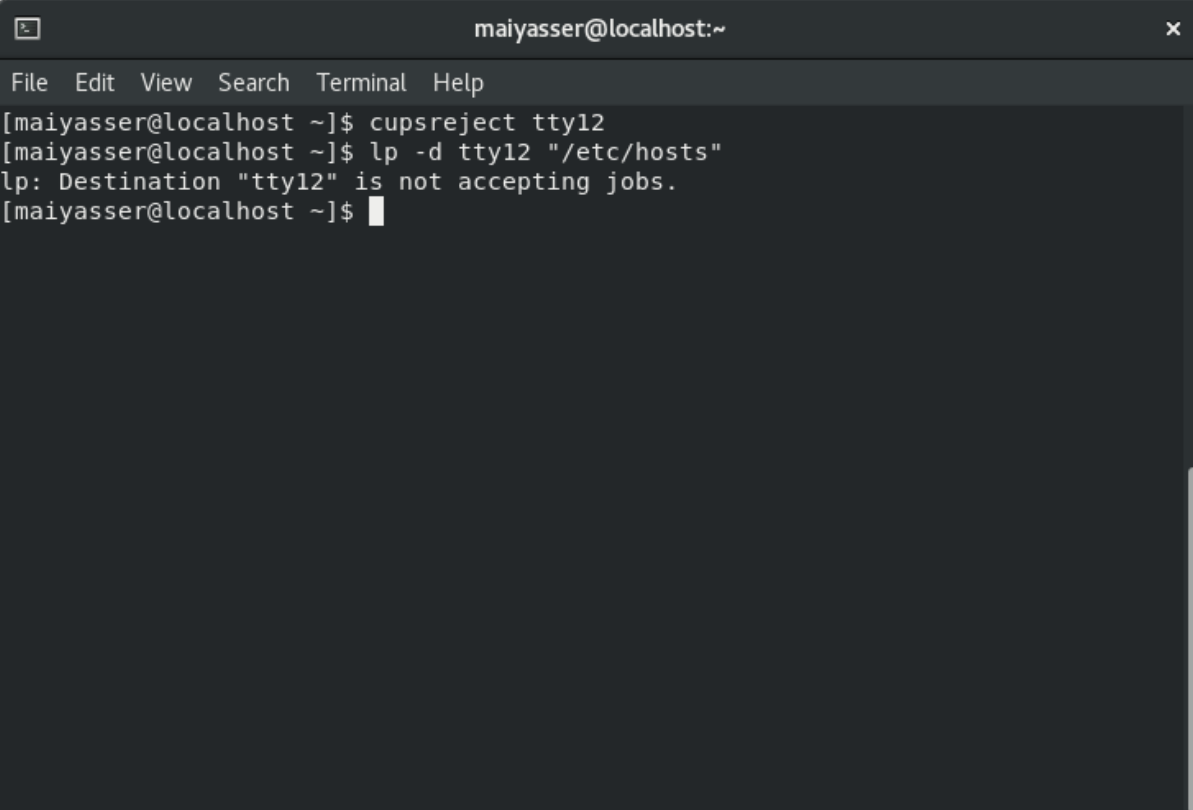
```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@localhost ~]$ lpq -a  
Rank    Owner    Job      File(s)      Total Size  
active  maiyass  1        hosts        1024 bytes  
1st     maiyass  2        hosts        1024 bytes  
[maiyasser@localhost ~]$
```

17. Remove the second print job from the tty12 printer queue, and then allow the print jobs from the queue to be printed



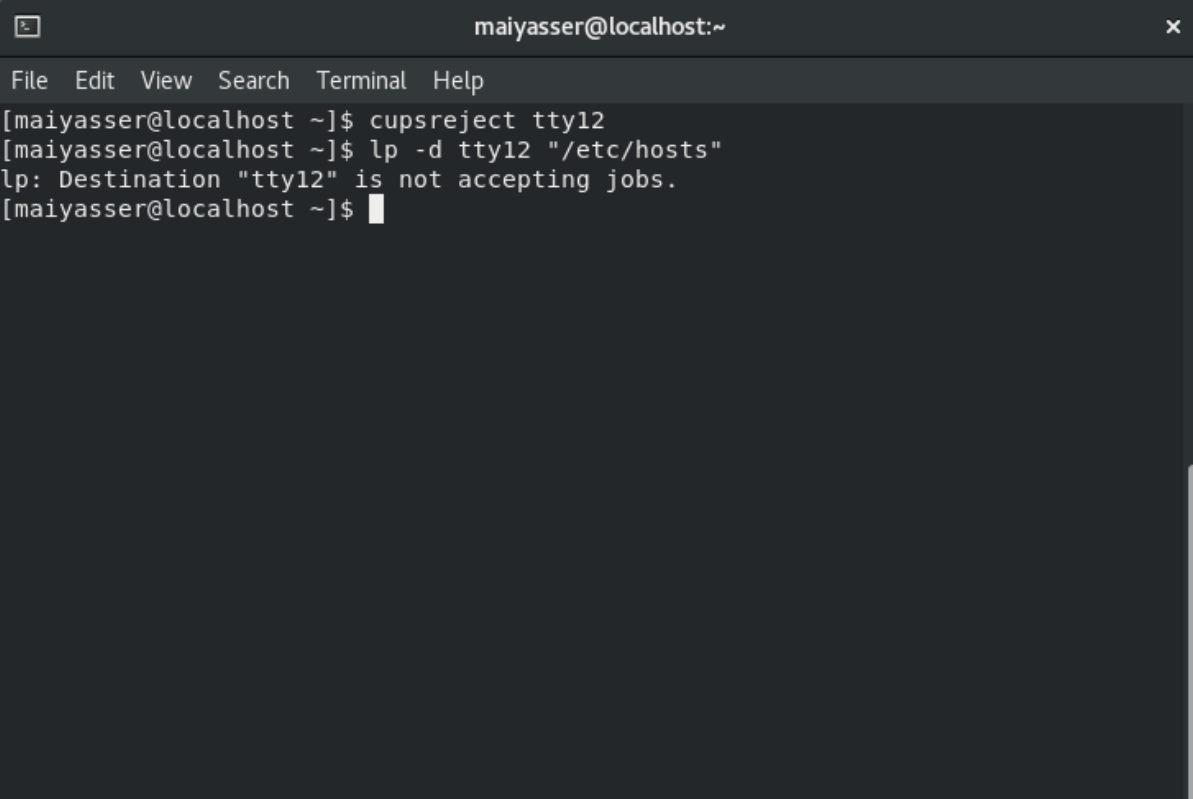
```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@localhost ~]$ lprm 2  
[maiyasser@localhost ~]$ lpq -a  
Rank    Owner    Job      File(s)      Total Size  
active  maiyass  1        hosts        1024 bytes  
[maiyasser@localhost ~]$
```

18. Prevent print jobs from going to the tty12 printer's print queue.



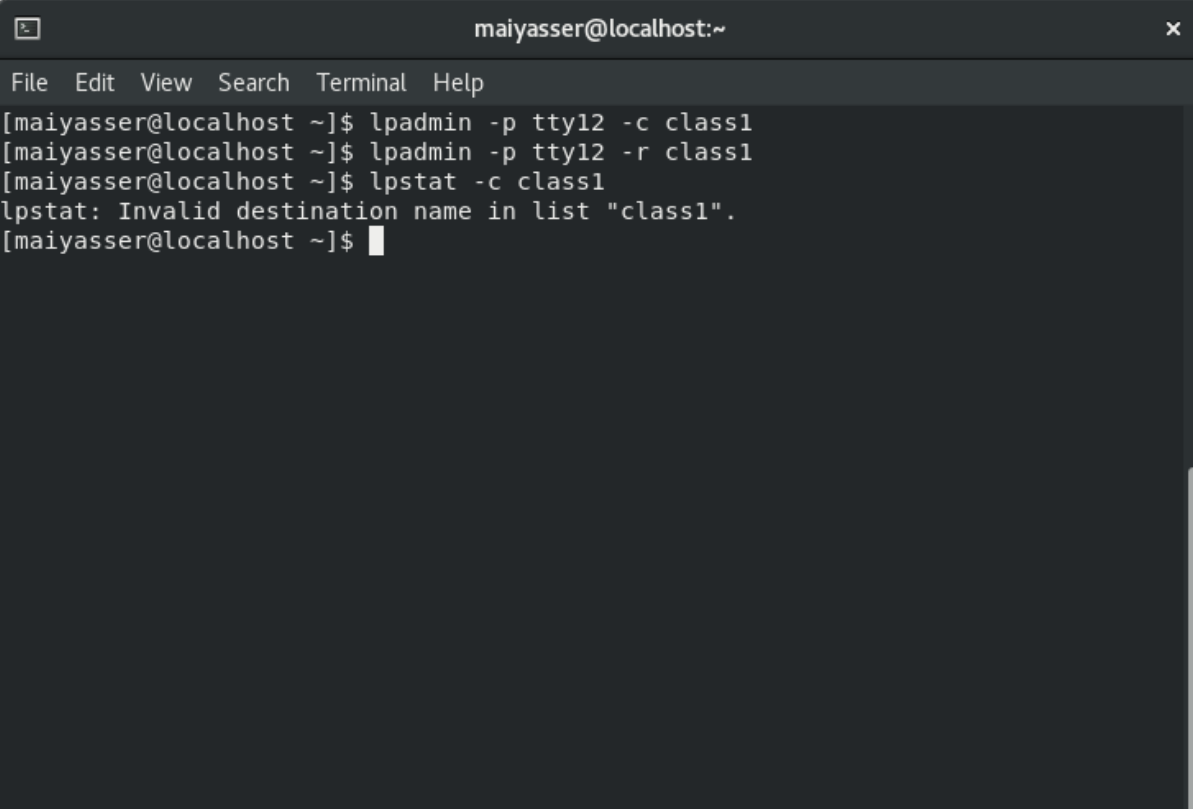
```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@localhost ~]$ cupsreject tty12  
[maiyasser@localhost ~]$ lp -d tty12 "/etc/hosts"  
lp: Destination "tty12" is not accepting jobs.  
[maiyasser@localhost ~]$
```

19. Verify this by trying to print the /etc/hosts file.



```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@localhost ~]$ cupsreject tty12  
[maiyasser@localhost ~]$ lp -d tty12 "/etc/hosts"  
lp: Destination "tty12" is not accepting jobs.  
[maiyasser@localhost ~]$
```

20. Delete the tty12 printer with the lpadmin command.



```
maiyasser@localhost:~  
File Edit View Search Terminal Help  
[maiyasser@localhost ~]$ lpadmin -p tty12 -c class1  
[maiyasser@localhost ~]$ lpadmin -p tty12 -r class1  
[maiyasser@localhost ~]$ lpstat -c class1  
lpstat: Invalid destination name in list "class1".  
[maiyasser@localhost ~]$
```

A terminal window titled 'maiyasser@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of three commands: 'lpadmin -p tty12 -c class1', 'lpadmin -p tty12 -r class1', and 'lpstat -c class1'. The output of the third command is 'lpstat: Invalid destination name in list "class1".'. The prompt returns to the shell after each command.