

LINUX ASSIGNMENT

1. Configure smtp in localhost.

```
root@sigmoid-ThinkPad-T460:/home/sigmoid# nano /etc/systemd/system/showtime.service
root@sigmoid-ThinkPad-T460:/home/sigmoid# sudo nano
/etc/systemd/system/showtime.service
root@sigmoid-ThinkPad-T460:/home/sigmoid# nano /etc/systemd/system/showtime.service
root@sigmoid-ThinkPad-T460:/home/sigmoid# sudo chmod +x /usr/local/bin/showtime.sh
root@sigmoid-ThinkPad-T460:/home/sigmoid# ls -l /usr/local/bin/showtime.sh
-rwxr-xr-x 1 root root 179 Aug 30 17:48 /usr/local/bin/showtime.sh
root@sigmoid-ThinkPad-T460:/home/sigmoid# cat /usr/local/bin/showtime.sh
#!/bin/bash
# Path to the file where the current time will be written
OUTPUT_FILE="/home/$(whoami)/current_time.txt"
```

```
# Write the current time to the file
date >> "$OUTPUT_FILE"
```

```
root@sigmoid-ThinkPad-T460:/home/sigmoid# nano /usr/local/bin/showtime.sh
root@sigmoid-ThinkPad-T460:/home/sigmoid# sudo systemctl daemon-reload
root@sigmoid-ThinkPad-T460:/home/sigmoid# sudo systemctl start showtime.service
root@sigmoid-ThinkPad-T460:/home/sigmoid# sudo systemctl status showtime.service
```

• showtime.service - Showtime Service

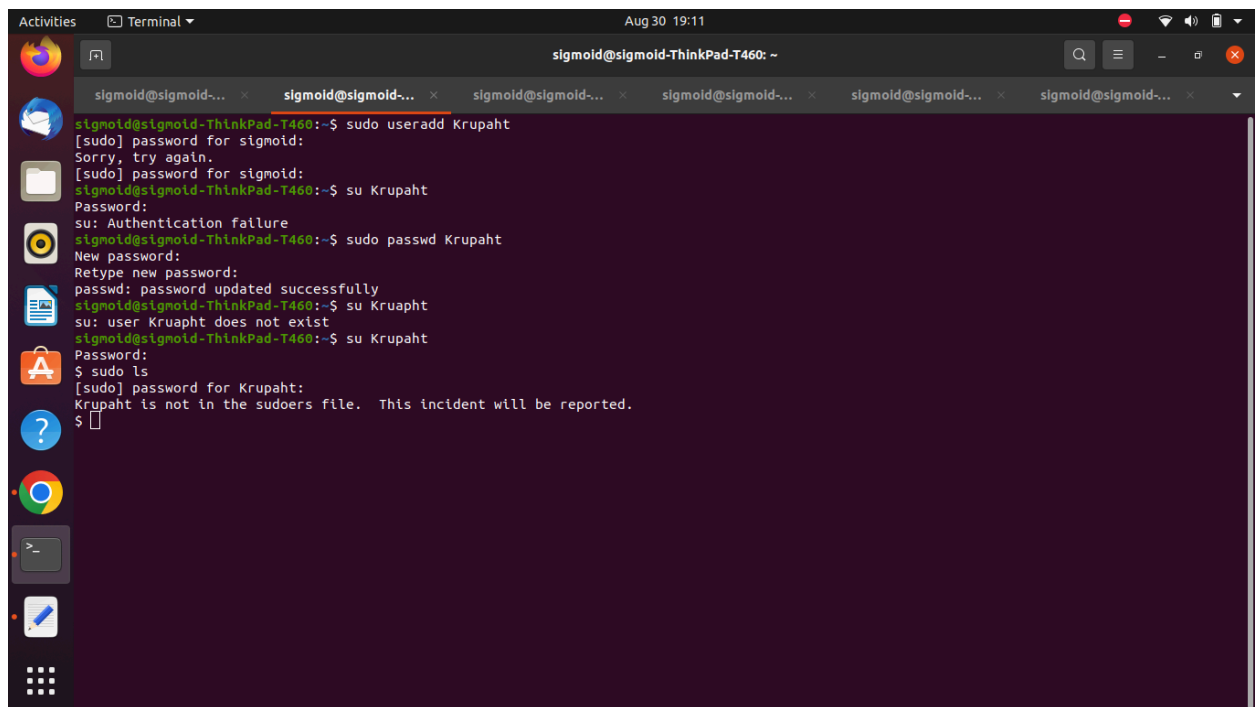
```
Loaded: loaded (/etc/systemd/system/showtime.service; enabled; vendor preset: enabled)
Active: active (running) since Fri 2024-08-30 20:00:58 IST; 14s ago
Main PID: 22379 (showtime.sh)
Tasks: 2 (limit: 4440)
Memory: 544.0K
CGroup: /system.slice/showtime.service
└─22379 /bin/bash /usr/local/bin/showtime.sh
└─22381 sleep 60
```

```
Activities Terminal Aug 30 19:10
sigmold@sigmold-ThinkPad-T460: ~

sigmold@sigmold-ThinkPad-T460: ~
/0.01/0/0, dsn=2.0.0, status=sent (delivered to command: procmail -a "SEXTENSION")
Aug 30 19:08:14 sigmold-ThinkPad-T460 postfix/qmgr[20843]: EE6E42A0123: removed
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/smtp[20854]: EF1EF2A0129: to=<krupa.ht@sigmoldanalytics.com>, relay=aspmx.l.google.com[142.251.12.27]:25, delay=131, delays=128/0.06/2.1/0.93, dsn=5.7.1, status=bounced (host aspmx.l.google.com[142.251.12.27] said: 550-5.7.1 [14.97.164.46] The IP you're using to send mail is not authorized to 550-5.7.1 send email directly to our servers. Please use the SMTP relay at your 550-5.7.1 service provider instead. For more information, go to 550 5.7.1 https://support.google.com/mail/?p=NotAuthorizedError 41be03b00d2f7-7d22e98c62csi1984781a12.369 - smtp (in reply to end of DATA command))
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/cleanup[20845]: 0A7412A0123: message-id=<20240830133815.0A7412A0123@sigmold-ThinkPad-T460>
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/bounce[20855]: EF1EF2A0129: sender non-delivery notification: 0A7412A0123
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 0A7412A0123: from=<>, size=3108, nrcpt=1 (queue active)
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/cleanup[20867]: 0B49B2A0120: message-id=<20240830133815.0B49B2A0120@sigmold-ThinkPad-T460>
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/bounce[20856]: EF1EF2A0129: sender delivery status notification: 0B49B2A0120
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 0B49B2A0120: from=<>, size=2918, nrcpt=1 (queue active)
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: EF1EF2A0129: removed
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/local[20857]: 0A7412A0123: to=<sigmold@sigmold-ThinkPad-T460>, relay=local, delay=0.01, delays=0/0/0/0.01, dsn=2.0.0, status=sent (delivered to command: procmail -a "SEXTENSION")
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 0A7412A0123: removed
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/local[20857]: 0B49B2A0120: to=<sigmold@sigmold-ThinkPad-T460>, relay=local, delay=0.02, delays=0/0.01/0/0.01, dsn=2.0.0, status=sent (delivered to command: procmail -a "SEXTENSION")
Aug 30 19:08:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 0B49B2A0120: removed
Aug 30 19:08:20 sigmold-ThinkPad-T460 postfix/local[20858]: 118072A0128: to=<sigmold@sigmold-ThinkPad-T460>, relay=local, delay=8, delays=0/0.01/0/0.01, dsn=2.0.0, status=sent (delivered to command: procmail -a "SEXTENSION")
Aug 30 19:08:20 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 118072A0128: removed
Aug 30 19:09:15 sigmold-ThinkPad-T460 postfix/pickup[20842]: 2981E2A0121: uid=1000 from=<sigmold>
Aug 30 19:09:15 sigmold-ThinkPad-T460 postfix/cleanup[20845]: 2981E2A0121: message-id=<20240830133915.2981E2A0121@sigmold-ThinkPad-T460>
Aug 30 19:09:15 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 2981E2A0121: from=<sigmold@sigmold-ThinkPad-T460>, size=327, nrcpt=1 (queue active)
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/smtp[20850]: 2981E2A0121: to=<krupa.ht@sigmoldanalytics.com>, relay=aspmx.l.google.com[142.251.12.27]:25, delay=2.1, delays=0/0/1.3/0.86, dsn=2.0.0, status=sent (250 2.0.0 OK 1725025157 41be03b00d2f7-7d22e9bf298si4166666a12.605 - smtp)
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/cleanup[20867]: 4A1622A0123: message-id=<20240830133917.4A1622A0123@sigmold-ThinkPad-T460>
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/bounce[20856]: 2981E2A0121: sender delivery status notification: 4A1622A0123
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 4A1622A0123: from=<>, size=2266, nrcpt=1 (queue active)
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 2981E2A0121: removed
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/local[20857]: 4A1622A0123: to=<sigmold@sigmold-ThinkPad-T460>, relay=local, delay=0.02, delays=0/0.01/0/0.01, dsn=2.0.0, status=sent (delivered to command: procmail -a "SEXTENSION")
Aug 30 19:09:17 sigmold-ThinkPad-T460 postfix/qmgr[20843]: 4A1622A0123: removed
sigmold@sigmold-ThinkPad-T460:~$
```

2. Create a user in your localhost, which should not be able to execute the sudo command.

```
sigmoid@sigmoid-ThinkPad-T460:~$ sudo useradd Krupaht
[sudo] password for sigmoid:
Sorry, try again.
[sudo] password for sigmoid:
sigmoid@sigmoid-ThinkPad-T460:~$ su Krupaht
Password:
su: Authentication failure
sigmoid@sigmoid-ThinkPad-T460:~$ sudo passwd Krupaht
New password:
Retype new password:
passwd: password updated successfully
sigmoid@sigmoid-ThinkPad-T460:~$ su Kruapht
su: user Kruapht does not exist
sigmoid@sigmoid-ThinkPad-T460:~$ su Krupaht
Password:
$ sudo ls
[sudo] password for Krupaht:
Krupaht is not in the sudoers file. This incident will be reported.
```



The screenshot shows a terminal window titled "sigmoid@sigmoid-ThinkPad-T460: ~" with a dark purple background. The terminal displays the following commands and their outputs:

```
sigmoid@sigmoid-ThinkPad-T460:~$ sudo useradd Krupaht
[sudo] password for sigmoid:
Sorry, try again.
[sudo] password for sigmoid:
sigmoid@sigmoid-ThinkPad-T460:~$ su Krupaht
Password:
su: Authentication failure
sigmoid@sigmoid-ThinkPad-T460:~$ sudo passwd Krupaht
New password:
Retype new password:
passwd: password updated successfully
sigmoid@sigmoid-ThinkPad-T460:~$ su Kruapht
su: user Kruapht does not exist
sigmoid@sigmoid-ThinkPad-T460:~$ su Krupaht
Password:
$ sudo ls
[sudo] password for Krupaht:
Krupaht is not in the sudoers file. This incident will be reported.
$
```

The terminal window has a sidebar on the left with icons for various applications, and the top bar shows the date and time as "Aug 30 19:11".

3.Configure your system in such a way that when a user type and executes a describe command from anywhere of the system it must list all the files and folders of the user's current directory.

```
sigmoid@sigmoid-ThinkPad-T460:~$ alias describe='ls -al'
sigmoid@sigmoid-ThinkPad-T460:~$ describe
total 3588052
drwxr-xr-x 22 sigmoid sigmoid    4096 Aug 30 19:04 .
drwxr-xr-x  3 root   root        4096 Aug 13 12:56 ..
-rw-----  1 sigmoid sigmoid    2701 Aug 29 19:25 .bash_history
-rw-r--r--  1 sigmoid sigmoid     220 Aug 13 12:56 .bash_logout
-rw-r--r--  1 sigmoid sigmoid    3771 Aug 13 12:56 .bashrc
-rw-rw-r--  1 sigmoid sigmoid    3782 Aug 30 16:56 .bashrckrupa
drwxrwxr-x 11 sigmoid sigmoid    4096 Aug 23 12:19 blah
drwxr-xr-x 19 sigmoid sigmoid    4096 Aug 30 17:05 .cache
drwx----- 14 sigmoid sigmoid    4096 Aug 30 17:05 .config
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Desktop
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Documents
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 29 00:36 Downloads
drwx-----  3 sigmoid sigmoid    4096 Aug 27 12:20 .gnupg
drwxrwxr-x  5 sigmoid sigmoid    4096 Aug 21 17:20 hei
drwxrwxr-x  2 sigmoid sigmoid    4096 Aug 21 17:24 heinew-bak
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 hello
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 17:07 hi
--wx-wx--x  1 sigmoid sigmoid      0 Aug 21 17:06 jerry
-rw-rw-r--  1 sigmoid sigmoid    3932 Aug 30 17:07 krupa
-rw-rw-r--  1 sigmoid sigmoid 2038075392 Aug 30 15:30 krupaa.tar
-rw-rw-r--  1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 16:06 listings
drwxr-xr-x  3 sigmoid sigmoid    4096 Aug 14 13:11 .local
-rw-rw-r--  1 sigmoid sigmoid   18971 Aug 26 14:53 log_activity
drwx-----  4 sigmoid sigmoid    4096 Aug 14 13:24 .mozilla
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Music
-rw-rw-r--  1 sigmoid sigmoid    127 Aug 30 19:03 myemail.txt
-----  1 sigmoid sigmoid      0 Aug 30 17:02 namfile
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 30 19:23 Pictures
drwx-----  3 sigmoid sigmoid    4096 Aug 19 15:16 .pki
-rw-r--r--  1 sigmoid sigmoid    807 Aug 13 12:56 .profile
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Public
-rw-rw-r--  1 sigmoid sigmoid    42 Aug 30 15:19 research.gz
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 29 13:04 .rpmdb
-rwxrwxr-x  1 sigmoid sigmoid     40 Aug 26 19:12 shellscrip
-rw-r--r--  1 sigmoid sigmoid  12288 Aug 26 19:14 .shellscript.swp
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 sigu
drwx-----  3 sigmoid sigmoid    4096 Aug 19 13:24 snap
drwx-----  2 sigmoid sigmoid    4096 Aug 14 13:12 .ssh
```

```
-rw-r--r-- 1 sigmoid sigmoid      0 Aug 14 13:18 .sudo_as_admin_successful
drwxr-xr-x 2 sigmoid sigmoid    4096 Aug 14 13:11 Templates
drwxr-xr-x 2 sigmoid sigmoid    4096 Aug 14 13:11 Videos
sigmoid@sigmoid-ThinkPad-T460:~$ pwd
/home/sigmoid
sigmoid@sigmoid-ThinkPad-T460:~$ cd ..
sigmoid@sigmoid-ThinkPad-T460:/home$ describe
total 12
drwxr-xr-x 3 root  root  4096 Aug 13 12:56 .
drwxr-xr-x 20 root  root  4096 Aug 13 12:56 ..
drwxr-xr-x 22 sigmoid sigmoid 4096 Aug 30 19:04 sigmoid
```

4.Users can put a compressed file at any path of the linux file system. The name of the file will be research and the extension will be of compression type, example for gzip type extension will be .gz.

You have to find the file and check the compression type and uncompress it.

```
sigmoid@sigmoid-ThinkPad-T460:~$ ls -ltr
total 3587972
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Videos
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Templates
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Public
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Music
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Documents
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Desktop
drwx----- 3 sigmoid sigmoid 4096 Aug 19 13:24 snap
--wx-wx--x 1 sigmoid sigmoid 0 Aug 21 17:06 jerry
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 hello
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 sigu
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 krupa
drwxrwxr-x 5 sigmoid sigmoid 4096 Aug 21 17:20 hei
drwxrwxr-x 2 sigmoid sigmoid 4096 Aug 21 17:24 heinew-bak
-rw-rw-r-- 1 sigmoid sigmoid 930 Aug 22 16:06 listings
-rw-rw-r-- 1 sigmoid sigmoid 930 Aug 22 17:07 hi
-rw-rw-r-- 1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
drwxrwxr-x 11 sigmoid sigmoid 4096 Aug 23 12:19 blah
-rw-rw-r-- 1 sigmoid sigmoid 18971 Aug 26 14:53 log_activity
-rwxrwxr-x 1 sigmoid sigmoid 40 Aug 26 19:12 shellscrip
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 28 15:29 Pictures
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 29 00:36 Downloads
-rw-rw-r-- 1 sigmoid sigmoid 42 Aug 30 15:19 research.gz
-rw-rw-r-- 1 sigmoid sigmoid 2038075392 Aug 30 15:30 krupaa.tar
sigmoid@sigmoid-ThinkPad-T460:~$ gzip krupaa.tar
sigmoid@sigmoid-ThinkPad-T460:~$ nano ~/.bashrc
sigmoid@sigmoid-ThinkPad-T460:~$ nano ~/.bashrc
sigmoid@sigmoid-ThinkPad-T460:~$ ls -ltr
total 2847920
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Videos
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Templates
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Public
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Music
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Documents
drwxr-xr-x 2 sigmoid sigmoid 4096 Aug 14 13:11 Desktop
drwx----- 3 sigmoid sigmoid 4096 Aug 19 13:24 snap
--wx-wx--x 1 sigmoid sigmoid 0 Aug 21 17:06 jerry
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 hello
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 sigu
-rw-rw-r-- 1 sigmoid sigmoid 0 Aug 21 17:07 krupa
```

```

drwxrwxr-x 5 sigmoid sigmoid      4096 Aug 21 17:20 hei
drwxrwxr-x 2 sigmoid sigmoid      4096 Aug 21 17:24 heinew-bak
-rw-rw-r-- 1 sigmoid sigmoid      930 Aug 22 16:06 listings
-rw-rw-r-- 1 sigmoid sigmoid      930 Aug 22 17:07 hi
-rw-rw-r-- 1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
drwxrwxr-x 11 sigmoid sigmoid     4096 Aug 23 12:19 blah
-rw-rw-r-- 1 sigmoid sigmoid     18971 Aug 26 14:53 log_activity
-rwxrwxr-x 1 sigmoid sigmoid       40 Aug 26 19:12 shellscrip
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 28 15:29 Pictures
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 29 00:36 Downloads
-rw-rw-r-- 1 sigmoid sigmoid       42 Aug 30 15:19 research.gz
-rw-rw-r-- 1 sigmoid sigmoid 1280261054 Aug 30 15:30 krupaa.tar.gz
sigmoid@sigmoid-ThinkPad-T460:~$ umask 0777
sigmoid@sigmoid-ThinkPad-T460:~$ source ~/.bashrc
sigmoid@sigmoid-ThinkPad-T460:~$ sudo nano /etc/profile
[sudo] password for sigmoid:
sigmoid@sigmoid-ThinkPad-T460:~$
sigmoid@sigmoid-ThinkPad-T460:~$ touch namfile
sigmoid@sigmoid-ThinkPad-T460:~$ ls -ltr
total 2847920
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Videos
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Templates
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Public
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Music
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Documents
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 14 13:11 Desktop
drwx----- 3 sigmoid sigmoid     4096 Aug 19 13:24 snap
--wx-wx--x 1 sigmoid sigmoid       0 Aug 21 17:06 jerry
-rw-rw-r-- 1 sigmoid sigmoid       0 Aug 21 17:07 hello
-rw-rw-r-- 1 sigmoid sigmoid       0 Aug 21 17:07 sigu
-rw-rw-r-- 1 sigmoid sigmoid       0 Aug 21 17:07 krupa
drwxrwxr-x 5 sigmoid sigmoid      4096 Aug 21 17:20 hei
drwxrwxr-x 2 sigmoid sigmoid      4096 Aug 21 17:24 heinew-bak
-rw-rw-r-- 1 sigmoid sigmoid      930 Aug 22 16:06 listings
-rw-rw-r-- 1 sigmoid sigmoid      930 Aug 22 17:07 hi
-rw-rw-r-- 1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
drwxrwxr-x 11 sigmoid sigmoid     4096 Aug 23 12:19 blah
-rw-rw-r-- 1 sigmoid sigmoid     18971 Aug 26 14:53 log_activity
-rwxrwxr-x 1 sigmoid sigmoid       40 Aug 26 19:12 shellscrip
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 28 15:29 Pictures
drwxr-xr-x 2 sigmoid sigmoid      4096 Aug 29 00:36 Downloads
-rw-rw-r-- 1 sigmoid sigmoid       42 Aug 30 15:19 research.gz
-rw-rw-r-- 1 sigmoid sigmoid 1280261054 Aug 30 15:30 krupaa.tar.gz
----- 1 sigmoid sigmoid         0 Aug 30 17:02 namfile

```

5.Configure your system in such a way that any user of your system creates a file then there should not be permission to do any activity in that file.

```
sigmoid@sigmoid-ThinkPad-T460:/$ nano ~/.bashrc
sigmoid@sigmoid-ThinkPad-T460:/$ source ~/.bashrc
sigmoid@sigmoid-ThinkPad-T460:/$ sudo nano /etc/profile
[sudo] password for sigmoid:
sigmoid@sigmoid-ThinkPad-T460:/$ source /etc/profile
sigmoid@sigmoid-ThinkPad-T460:/$ pwd
/
sigmoid@sigmoid-ThinkPad-T460:/$ cd /home/
sigmoid@sigmoid-ThinkPad-T460:/home$ cd sigmoid
sigmoid@sigmoid-ThinkPad-T460:~$ pwd
/home/sigmoid

sigmoid@sigmoid-ThinkPad-T460:~$ touch poiuy
sigmoid@sigmoid-ThinkPad-T460:~$ ls -ltr
total 3588004
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Videos
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Templates
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Public
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Music
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Documents
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Desktop
drwx----- 3 sigmoid sigmoid    4096 Aug 19 13:24 snap
--wx-wx--x  1 sigmoid sigmoid      0 Aug 21 17:06 jerry
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 hello
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 sigu
drwxrwxr-x  5 sigmoid sigmoid    4096 Aug 21 17:20 hei
drwxrwxr-x  2 sigmoid sigmoid    4096 Aug 21 17:24 heinew-bak
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 16:06 listings
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 17:07 hi
-rw-rw-r--  1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
drwxrwxr-x 11 sigmoid sigmoid    4096 Aug 23 12:19 blah
-rw-rw-r--  1 sigmoid sigmoid   18971 Aug 26 14:53 log_activity
-rwxrwxr-x  1 sigmoid sigmoid     40 Aug 26 19:12 shellscrip
-rw-rw-r--  1 sigmoid sigmoid    42 Aug 30 15:19 research.gz
-rw-rw-r--  1 sigmoid sigmoid 2038075392 Aug 30 15:30 krupaa.tar
----- 1 sigmoid sigmoid      0 Aug 30 17:02 namfile
-rw-rw-r--  1 sigmoid sigmoid   3932 Aug 30 17:07 krupa
-rw-rw-r--  1 sigmoid sigmoid    127 Aug 30 19:03 myemail.txt
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 30 19:27 Pictures
-rw-rw-r--  1 sigmoid sigmoid   3048 Aug 30 19:29 'Untitled Document 1'
-rw-r--r--  1 sigmoid sigmoid    228 Aug 30 19:35 current_time.txt
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 30 19:42 Downloads
```



```

-rw-r--r-- 1 root  root      455 Aug 30 19:48 showtime1.log
-rw-r--r-- 1 root  root      455 Aug 30 19:52 showtimekrupa.log
-rw-rw-r-- 1 sigmoid sigmoid 1467 Aug 30 20:04 'Untitled Document 2'
-rw-r--r-- 1 root  root     1652 Aug 30 22:28 showtime.log
----- 1 sigmoid sigmoid      0 Aug 30 22:29 poiuy

```

```

sigmoid@sigmoid-ThinkPad-T460:~$ touch poiuy
sigmoid@sigmoid-ThinkPad-T460:~$ ls -ltr
total 3588004
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Videos
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Templates
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Public
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Music
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Documents
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 14 13:11 Desktop
drwx----- 3 sigmoid sigmoid    4096 Aug 19 13:24 snap
--wx-wx-wx  1 sigmoid sigmoid      0 Aug 21 17:06 jerry
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 hello
-rw-rw-r--  1 sigmoid sigmoid      0 Aug 21 17:07 signu
drwxrwxr-x  5 sigmoid sigmoid    4096 Aug 21 17:20 hei
drwxrwxr-x  2 sigmoid sigmoid    4096 Aug 21 17:24 helnew-bak
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 16:06 listings
-rw-rw-r--  1 sigmoid sigmoid     930 Aug 22 17:07 hi
-rw-rw-r--  1 sigmoid sigmoid 1635911680 Aug 23 12:10 Krupatar
drwxrwxr-x 11 sigmoid sigmoid    4096 Aug 23 12:19 blah
-rw-rw-r--  1 sigmoid sigmoid   18971 Aug 26 14:53 log_activity
drwxrwxr-x  1 sigmoid sigmoid     40 Aug 26 19:12 shellscript
-rw-rw-r--  1 sigmoid sigmoid     42 Aug 30 15:19 research.gz
-rw-rw-r--  1 sigmoid sigmoid 2038075392 Aug 30 15:30 krupaa.tar
----- 1 sigmoid sigmoid      0 Aug 30 17:02 namfile
-rw-rw-r--  1 sigmoid sigmoid    3932 Aug 30 17:07 krupa
-rw-rw-r--  1 sigmoid sigmoid    127 Aug 30 19:03 myemail.txt
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 30 19:27 Pictures
-rw-rw-r--  1 sigmoid sigmoid   3048 Aug 30 19:29 'Untitled Document 1'
-rw-r--r--  1 sigmoid sigmoid    228 Aug 30 19:35 current_time.txt
drwxr-xr-x  2 sigmoid sigmoid    4096 Aug 30 19:42 Downloads
-rw-r--r--  1 root  root        455 Aug 30 19:48 showtime1.log
-rw-r--r--  1 root  root        455 Aug 30 19:52 showtimekrupa.log
-rw-rw-r--  1 sigmoid sigmoid  1467 Aug 30 20:04 'Untitled Document 2'
-rw-r--r--  1 root  root     1652 Aug 30 22:28 showtime.log
----- 1 sigmoid sigmoid      0 Aug 30 22:29 poiuy
sigmoid@sigmoid-ThinkPad-T460:~$

```

6. Create a service with the name `showtime`, after starting the service, every minute it should print the current time in a file in the user home directory.

Ex:-

`sudo service showtime start` -> It should start writing in file.

`sudo service showtime stop` -> It should stop writing in file.

`sudo service showtime status` -> It should show status.

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl enable sendmail
```

`sendmail.service` is not a native service, redirecting to `systemd-sysv-install`.

```
Executing: /lib/systemd/systemd-sysv-install enable sendmail
```

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl start sendmail
```

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl status sendmail
```

- `sendmail.service` - LSB: powerful, efficient, and scalable Mail Transport Agent

Loaded: loaded (`/etc/init.d/sendmail`; generated)

Active: active (exited) since Fri 2024-08-30 18:40:50 IST; 6s ago

Docs: `man:systemd-sysv-generator(8)`

Process: 19773 `ExecStart=/etc/init.d/sendmail start (code=exited, status=0/)`

```
Aug 30 18:40:47 sigmoid-ThinkPad-T460 systemd[1]: Starting LSB: powerful, effic>
```

```
Aug 30 18:40:47 sigmoid-ThinkPad-T460 sendmail[19773]: * Starting Mail Transpo>
```

```
Aug 30 18:40:48 sigmoid-ThinkPad-T460 su[19820]: (to smmsp) root on none
```

```
Aug 30 18:40:48 sigmoid-ThinkPad-T460 su[19820]: pam_unix(su:session): session >
```

```
Aug 30 18:40:48 sigmoid-ThinkPad-T460 su[19820]: pam_unix(su:session): session >
```

```
Aug 30 18:40:48 sigmoid-ThinkPad-T460 sendmail[19837]: start-stop-daemon: unabl>
```

```
Aug 30 18:40:50 sigmoid-ThinkPad-T460 sendmail[19953]: /etc/init.d/sendmail: 30>
```

```
Aug 30 18:40:50 sigmoid-ThinkPad-T460 sendmail[19773]: ...done.
```

```
Aug 30 18:40:50 sigmoid-ThinkPad-T460 systemd[1]: Started LSB: powerful, effici>
```

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl status postfix
```

- `postfix.service` - Postfix Mail Transport Agent

Loaded: loaded (`/lib/systemd/system/postfix.service`; enabled; vendor preset: enabled)

Active: inactive (dead) since Fri 2024-08-30 18:40:47 IST; 26min ago

Main PID: 18476 (`code=exited, status=0/SUCCESS`)

```
Aug 30 18:34:03 sigmoid-ThinkPad-T460 systemd[1]: Starting Postfix Mail Transport Agent...
```

```
Aug 30 18:34:03 sigmoid-ThinkPad-T460 systemd[1]: Finished Postfix Mail Transport Agent.
```

```
Aug 30 18:40:47 sigmoid-ThinkPad-T460 systemd[1]: postfix.service: Succeeded.
```

```
Aug 30 18:40:47 sigmoid-ThinkPad-T460 systemd[1]: Stopped Postfix Mail Transport Agent.
```

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl start postfix
```

```
sigmoid@sigmoid-ThinkPad-T460:~$ systemctl enable postfix
```

Synchronizing state of `postfix.service` with SysV service script with `/lib/systemd/systemd-sysv-install`.

```
Executing: /lib/systemd/systemd-sysv-install enable postfix
```

sigmoid@sigmoid-ThinkPad-T460:~\$ systemctl status postfix

- postfix.service - Postfix Mail Transport Agent

Loaded: loaded (/lib/systemd/system/postfix.service; enabled; vendor preset: enabled)

Active: active (exited) since Fri 2024-08-30 19:08:11 IST; 48s ago

Main PID: 20844 (code=exited, status=0/SUCCESS)

Tasks: 0 (limit: 4440)

Memory: 0B

CGroup: /system.slice/postfix.service

Aug 30 19:08:11 sigmoid-ThinkPad-T460 systemd[1]: Starting Postfix Mail Transport Agent...

Aug 30 19:08:11 sigmoid-ThinkPad-T460 systemd[1]: Finished Postfix Mail Transport Agent.

sigmoid@sigmoid-ThinkPad-T460:~\$ echo "Subject: Test Email\n\nThis is a test email body."

| sendmail -v krupa.ht@sigmoidanalytics.com

Mail Delivery Status Report will be mailed to <sigmoid>.

sigmoid@sigmoid-ThinkPad-T460:~\$ sudo cat /var/log/mail.log