

Linux OS Automation

# Question 3

ITLXA0-44



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## Table of Contents

Introduction

Locate Archive Directory

Create The Archive Directory

Create Log Report .txt File

Create a Script Folder

Create the Script document .sh

Script commands: (Date parameter)

Script Commands: (List of files moved)

Script Commands: (Output message)

Make Script Executable: (chmod +x)

Run Script

Script output on the log\_cleanup\_report.txt

## Introduction

In this project, we'll create a simple shell script to help me clean up old log files from my computer. My main objective is to move old .log files older than 7 days to a safe place called the archive folder.

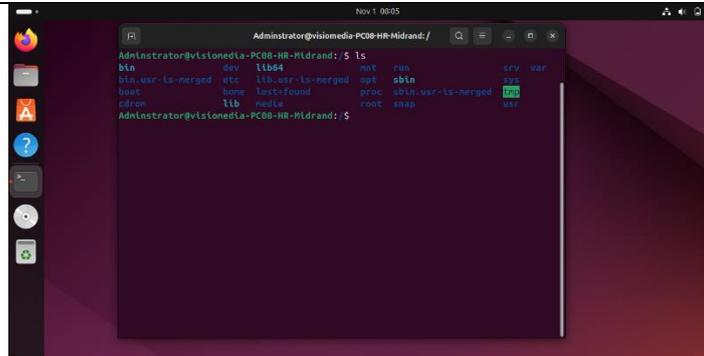
The script will also make a report showing the date it ran, which files were moved, and if there were any problems.

## Locate Archive Directory

Open the terminal on your Ubuntu virtual machine.

Check for the directory in the root folder.

If you don't see it that means you need to create it.



```
Administrator@visionedia-PC08-HR-Midrand: / $ ls
bin          dev          lib64       net         rpm         srv         var
bin.usr-is-merged  etc         lib.usr-is-merged  opt        sbin        sbin.usr-is-merged  usr
boot         home        lost+found  proc        sbin.usr-is-merged  tmp
cdrom        lib         media       root        snap
Administrator@visionedia-PC08-HR-Midrand: / $
```

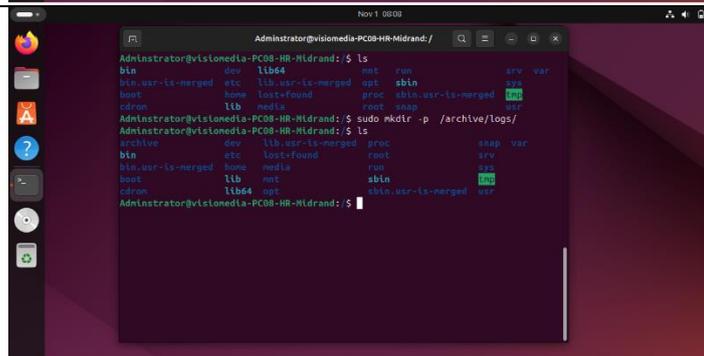
## Create The Archive Directory

### Directory

Use the terminal to create the folder.

Type `sudo mkdir -p /archive/logs` and press Enter.

This will make the required folder to store your old log files.

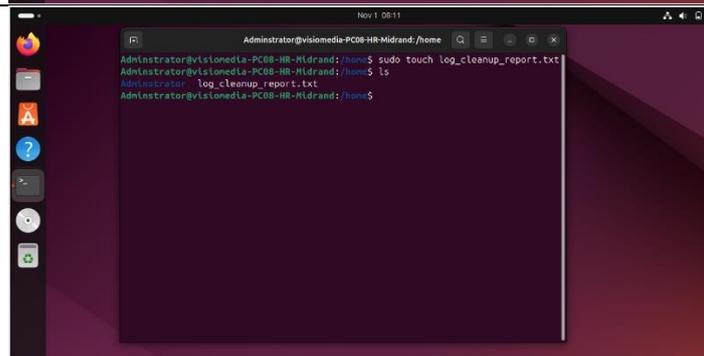


```
Administrator@visionedia-PC08-HR-Midrand: / $ ls
bin          dev          lib64       net         rpm         srv         var
bin.usr-is-merged  etc         lib.usr-is-merged  opt        sbin        sbin.usr-is-merged  usr
boot         home        lost+found  proc        sbin.usr-is-merged  tmp
cdrom        lib         media       root        snap
Administrator@visionedia-PC08-HR-Midrand: / $ sudo mkdir -p /archive/logs/
Administrator@visionedia-PC08-HR-Midrand: / $ ls
archive      dev          lib64       net         rpm         srv         var
bin          dev          lib64       net         rpm         srv         var
bin.usr-is-merged  etc         lib.usr-is-merged  opt        sbin        sbin.usr-is-merged  usr
boot         home        lost+found  proc        sbin.usr-is-merged  tmp
cdrom        lib         media       root        snap
Administrator@visionedia-PC08-HR-Midrand: / $
```

## Create Log Report .txt File

### File

The report file will be named `log_cleanup_report.txt` and saved in your home directory.



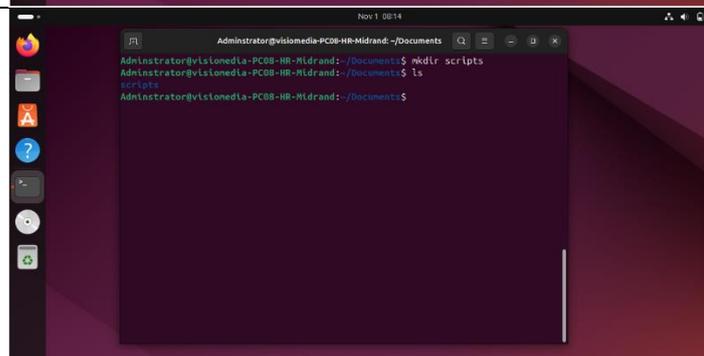
```
Administrator@visionedia-PC08-HR-Midrand: /home $ sudo touch log_cleanup_report.txt
Administrator@visionedia-PC08-HR-Midrand: /home $ ls
Administrator@visionedia-PC08-HR-Midrand: /home $ touch log_cleanup_report.txt
Administrator@visionedia-PC08-HR-Midrand: /home $
```

## Create a Script Folder

In your home directory, go to Documents and create a folder named scripts.

Use the command `mkdir /Documents/scripts` to make the folder.

This is where I will keep all my scripts.



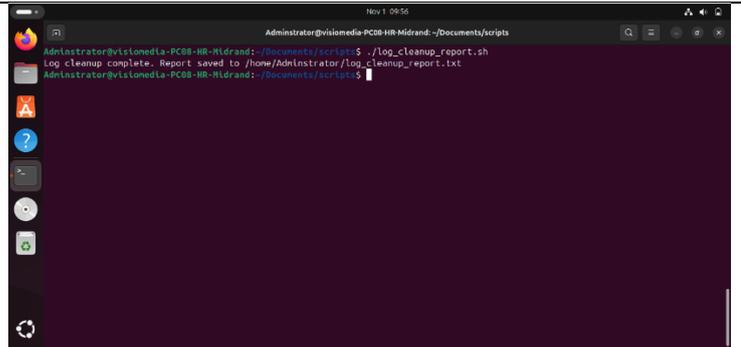
```
Administrator@visionedia-PC08-HR-Midrand: ~/Documents $ mkdir scripts
Administrator@visionedia-PC08-HR-Midrand: ~/Documents $ ls
Administrator@visionedia-PC08-HR-Midrand: ~/Documents $
```



## Run Script

Now it's time to run the `log_cleanup_report.sh` cleanup script.

While still in the scripts folder type the I will type the following `./log_cleanup_report.sh`.

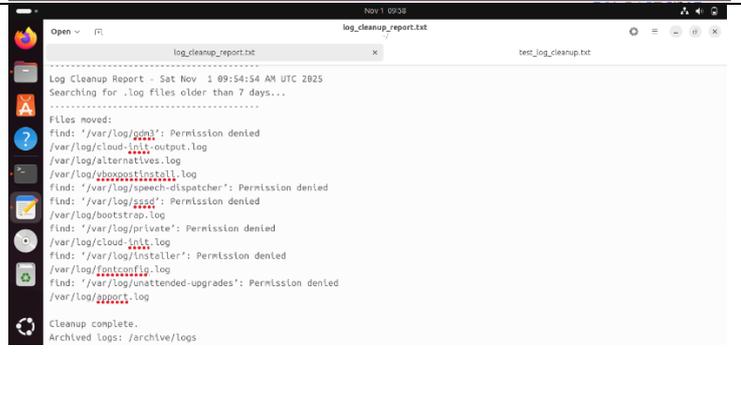


```
Administrator@visionmedia-PC08-NR-Midrand:~/Documents/scripts$ ./log_cleanup_report.sh
log cleanup complete. Report saved to /home/Administrator/log_cleanup_report.txt
Administrator@visionmedia-PC08-NR-Midrand:~/Documents/scripts$
```

## Script output on the `log_cleanup_report.txt`

When the script finishes, it will log the details of what the scripted has done in a file called `log_cleanup_report.txt`.

This report will include the date and time the script ran, a list of files that were moved, and any errors that happened.



```
Open - [?] log_cleanup_report.txt
-----
Log Cleanup Report - Sat Nov 1 09:54:54 AM UTC 2025
Searching for .log files older than 7 days...
-----
Files moved:
find: '/var/log/gdm3': Permission denied
/var/log/cloud-init-output.log
/var/log/alternatives.log
/var/log/bovosttinstall.log
find: '/var/log/speech-dispatcher': Permission denied
find: '/var/log/': Permission denied
/var/log/bootsrap.log
find: '/var/log/private': Permission denied
/var/log/cloud-init.log
find: '/var/log/installer': Permsston denied
/var/log/fonconfig.log
find: '/var/log/unattended-upgrades': Permission denied
/var/log/20251101.log

Cleanup complete.
Archived logs: /archive/logs
```