

Linux Task-5

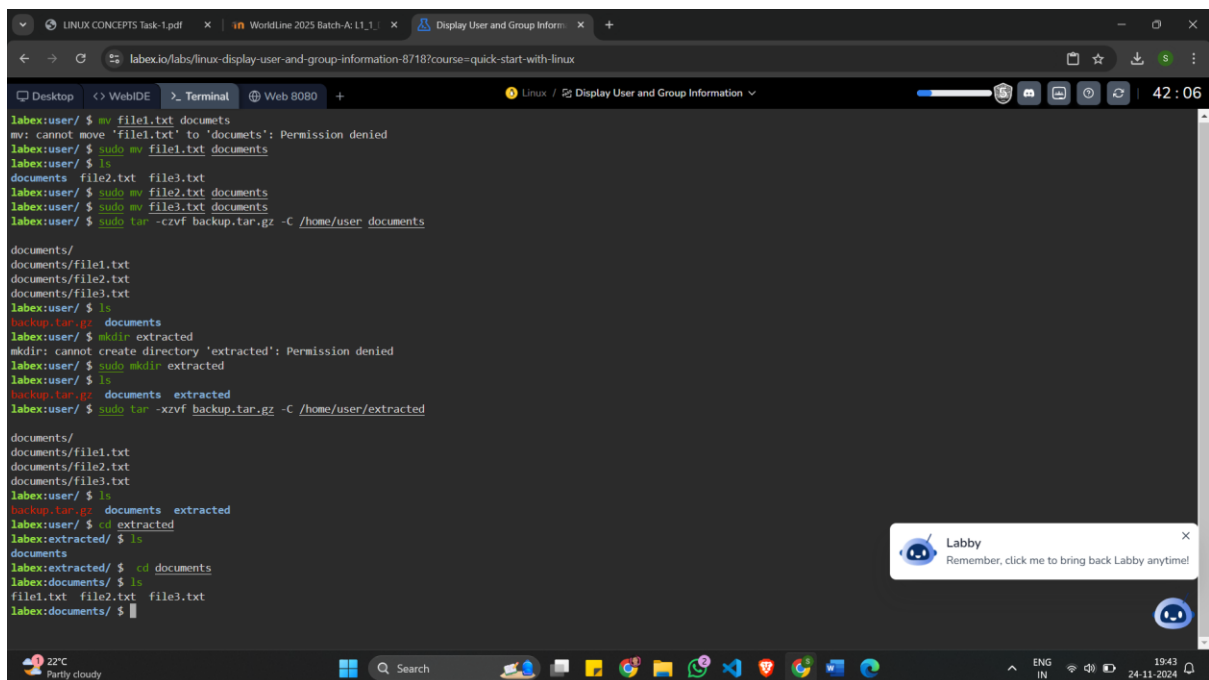
1. Compress the /home/user/documents Directory into a .tar.gz File Named backup.tar.gz

To compress the directory into a .tar.gz file, you can use the tar command along with gzip. Here's the command:

```
tar -czvf backup.tar.gz -C /home/user documents
```

- **tar**: The command used to create archives.
- **-c**: Create a new archive.
- **-z**: Compress the archive using gzip.
- **-v**: Verbose mode (displays the files being archived).
- **-f backup.tar.gz**: Specifies the name of the archive file (backup.tar.gz).
- **-C /home/user**: Changes the directory to /home/user before archiving the documents folder (this ensures the path in the archive is relative, not absolute).

This command will create a compressed file backup.tar.gz containing the contents of /home/user/documents.



```
labex:user/ $ mv file1.txt documents
mv: cannot move 'file1.txt' to 'documents': Permission denied
labex:user/ $ sudo mv file1.txt documents
labex:user/ $ ls
documents  file2.txt  file3.txt
labex:user/ $ sudo mv file2.txt documents
labex:user/ $ sudo mv file3.txt documents
labex:user/ $ sudo tar -czvf backup.tar.gz -C /home/user documents

documents/
documents/file1.txt
documents/file2.txt
documents/file3.txt
labex:user/ $ ls
backup.tar.gz  documents
labex:user/ $ mkdir extracted
mkdir: cannot create directory 'extracted': Permission denied
labex:user/ $ sudo mkdir extracted
labex:user/ $ ls
backup.tar.gz  documents  extracted
labex:user/ $ sudo tar -xvzf backup.tar.gz -C /home/user/extracted

documents/
documents/file1.txt
documents/file2.txt
documents/file3.txt
labex:user/ $ ls
backup.tar.gz  documents  extracted
labex:user/ $ cd extracted
labex:extracted/ $ ls
documents
labex:extracted/ $ cd documents
labex:documents/ $ ls
file1.txt  file2.txt  file3.txt
labex:documents/ $
```

2. Extract the Contents of backup.tar.gz into the /home/user/extracted Directory

To extract the contents of the backup.tar.gz file into /home/user/extracted, use the following command:

```
tar -xvzf backup.tar.gz -C /home/user/extracted
```

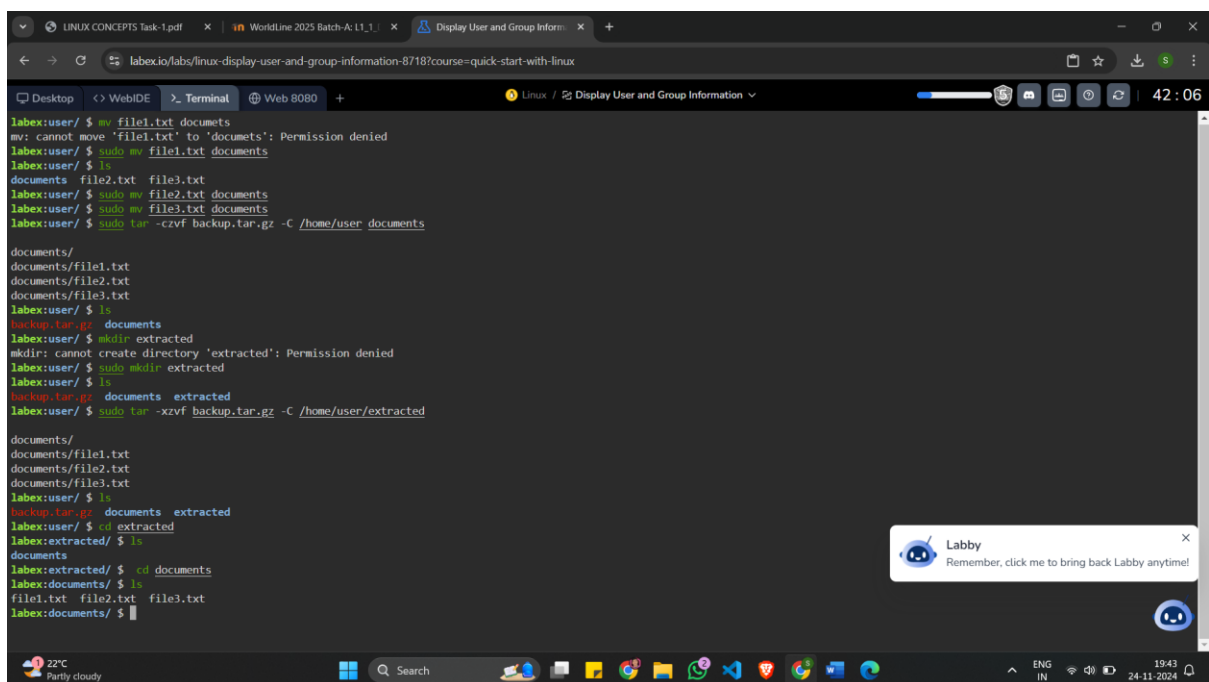
- **tar**: The command used to extract archives.
- **-x**: Extract files from the archive.
- **-z**: Decompress the archive using gzip.
- **-v**: Verbose mode (displays the files being extracted).
- **-f backup.tar.gz**: Specifies the archive file (backup.tar.gz).
- **-C /home/user/extracted**: Extracts the contents into the /home/user/extracted directory.

Make sure the /home/user/extracted directory exists before running the command, or create it with:

```
bash
```

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```
mkdir -p /home/user/extracted
```



The screenshot shows a terminal window with the following commands and output:

```
labex:user/ $ mv file1.txt documents
mv: cannot move 'file1.txt' to 'documents': Permission denied
labex:user/ $ sudo mv file1.txt documents
labex:user/ $ ls
documents  file2.txt  file3.txt
labex:user/ $ sudo mv file2.txt documents
labex:user/ $ sudo mv file3.txt documents
labex:user/ $ sudo tar -czvf backup.tar.gz -C /home/user documents
documents/
documents/file1.txt
documents/file2.txt
documents/file3.txt
labex:user/ $ ls
backup.tar.gz  documents
labex:user/ $ mkdir extracted
mkdir: cannot create directory 'extracted': Permission denied
labex:user/ $ sudo mkdir extracted
labex:user/ $ ls
backup.tar.gz  documents  extracted
labex:user/ $ sudo tar -xvzf backup.tar.gz -C /home/user/extracted
documents/
documents/file1.txt
documents/file2.txt
documents/file3.txt
labex:user/ $ ls
backup.tar.gz  documents  extracted
labex:user/ $ cd extracted
labex:extracted/ $ ls
documents
labex:extracted/ $ cd documents
labex:documents/ $ ls
file1.txt  file2.txt  file3.txt
labex:documents/ $
```

A Labby notification bubble is visible in the bottom right corner of the terminal window, stating: "Remember, click me to bring back Labby anytime!"

3. Simulate a System Reboot Using the Appropriate Command

To simulate a system reboot (without actually restarting the system), you can use the following command:

```
bash
```

Copy code

```
sudo reboot --no-wall
```

- **sudo:** Run the command with superuser (root) privileges.
- **reboot:** The command to restart the system.
- **--no-wall:** Suppresses the warning message (wall) that typically notifies all logged-in users about the impending reboot.

Note: This command doesn't immediately reboot the system but schedules the system for a reboot. The effect is that it will initiate a reboot as soon as possible, closing all running applications and logging out all users.

Simulating a Reboot Without Actually Restarting:

If you want to simulate the reboot process without actually rebooting the system, you can use the following approach to reboot into a maintenance mode:

```
sudo systemctl isolate multi-user.target
```

This simulates switching to a "non-graphical" runlevel (similar to a reboot into a terminal-only mode), without actually restarting the system.