**Backup and Restore**

**Objective**

Learn how to back up a directory into an archive file and restore it later on Amazon Linux.

**Step 1: Create a Sample Directory**

mkdir ~/mydata

cd ~/mydata

echo "File 1 content" > file1.txt

echo "File 2 content" > file2.txt

echo "File 3 content" > file3.txt

cd ~

You now have a directory ~/mydata with 3 files.

**Step 2: Backup the Directory**

Use tar to create a compressed backup archive:

tar -cvpzf mydata-backup.tar.gz ~/mydata

* c → create
* v → verbose (shows progress)
* p → preserve permissions
* z → compress with gzip
* f → file name

Check the backup file:

ls -lh mydata-backup.tar.gz

**Step 3: Simulate Data Loss**

Delete the original directory:

rm -rf ~/mydata

Verify it’s gone:

ls ~/mydata

(It should say *No such file or directory*.)

**Step 4: Restore the Backup**

Extract the archive:

tar -xvpzf mydata-backup.tar.gz -C ~/

**Step 5: Verify Restore**

ls ~/mydata

cat ~/mydata/file1.txt

You should see your original files restored with their content intact.