

Individual Assignment Part I

ឈ្មោះ៖ ម៉ៅ បញ្ញា

ពិន្ទុសរុប៖ ១៥ ពិន្ទុ

គោលបំណង

បន្ទាប់ពីបញ្ចប់លំហាត់នេះ និស្សិតអាច៖

- បង្កើត Archive ដោយប្រើ tar
- Compress File ដោយប្រើ gzip, bzip2, និង xz
- Extract Archive File
- មើលមាតិកាខាងក្នុង Archive
- ប្រៀបធៀបការប្រើប្រាស់ Compression ផ្សេងៗ

សម្ភារៈត្រូវមាន

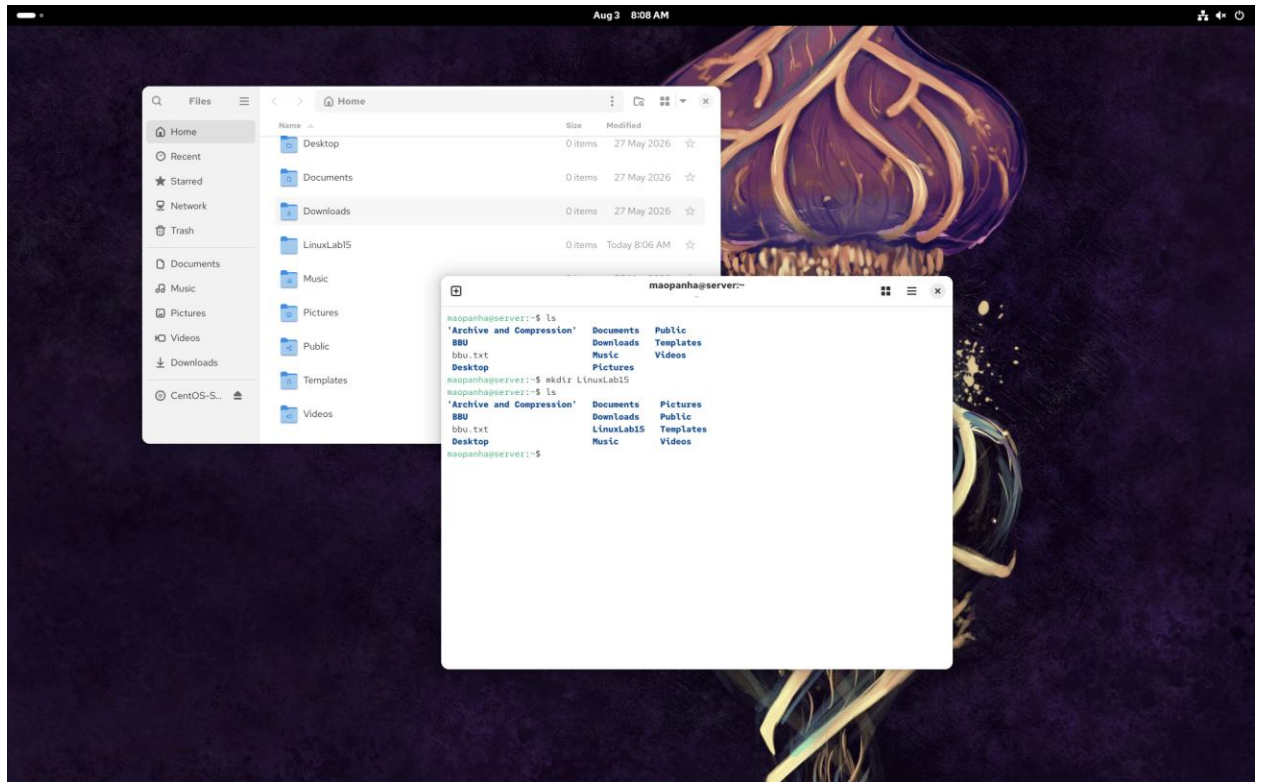
- Ubuntu / CentOS

សេចក្តីណែនាំ

❖ លំហាត់ទី១៖ បង្កើត Working Directory (១ ពិន្ទុ)

បង្កើត Folder មួយឈ្មោះ LinuxLab15 នៅក្នុង Home Directory របស់អ្នក។

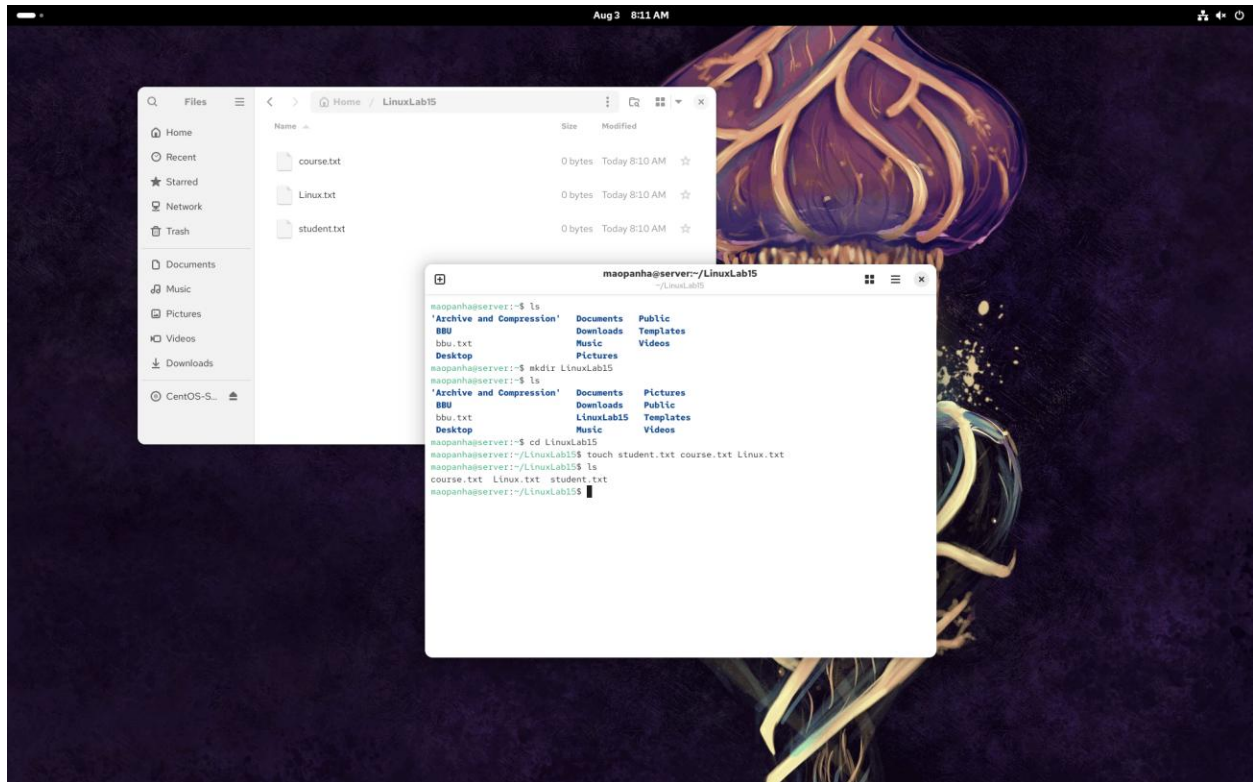
LinuxLab15



❖ លំហាត់ទី២៖ បង្កើត Sample Files (១ ពិន្ទុ)

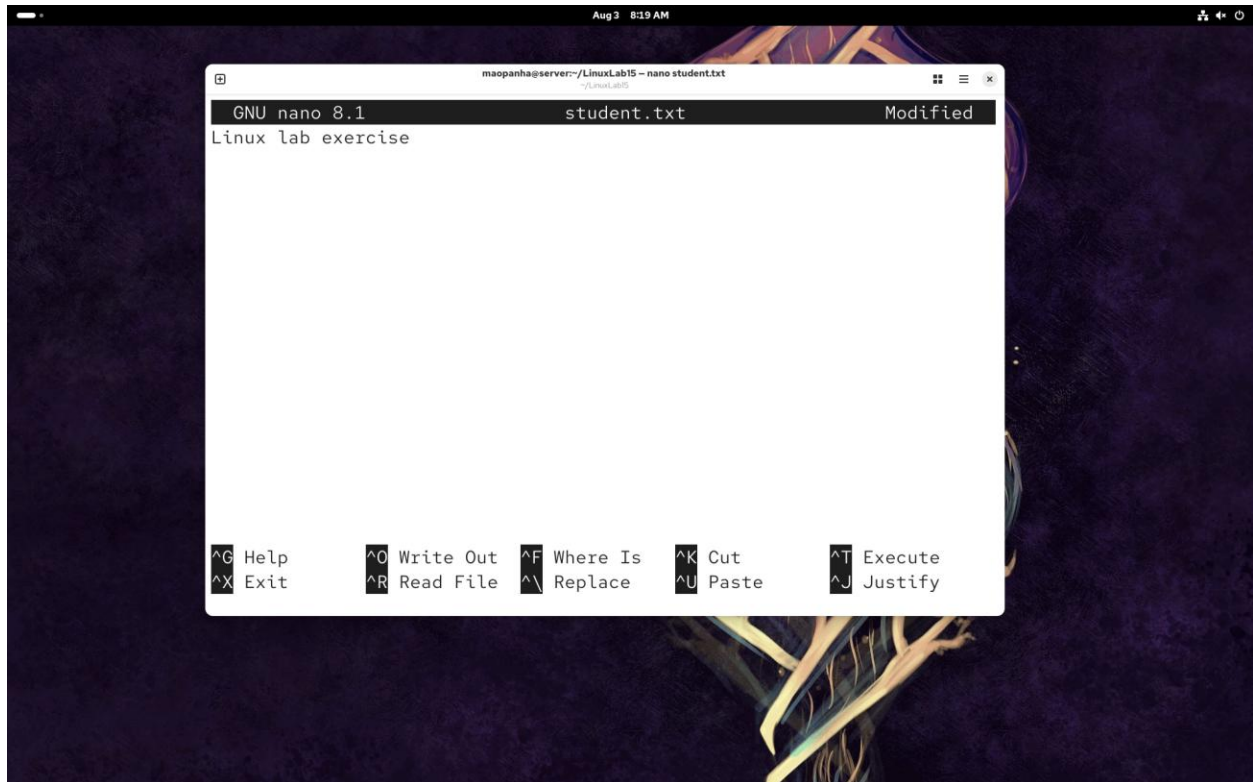
បង្កើត File ចំនួន ៣ ដូចខាងក្រោម៖

- ❖ student.txt
- ❖ course.txt
- ❖ linux.txt



បន្ទាប់មក បញ្ចូលអត្ថបទណាមួយទៅក្នុង File នីមួយៗ។
ឧទាហរណ៍៖

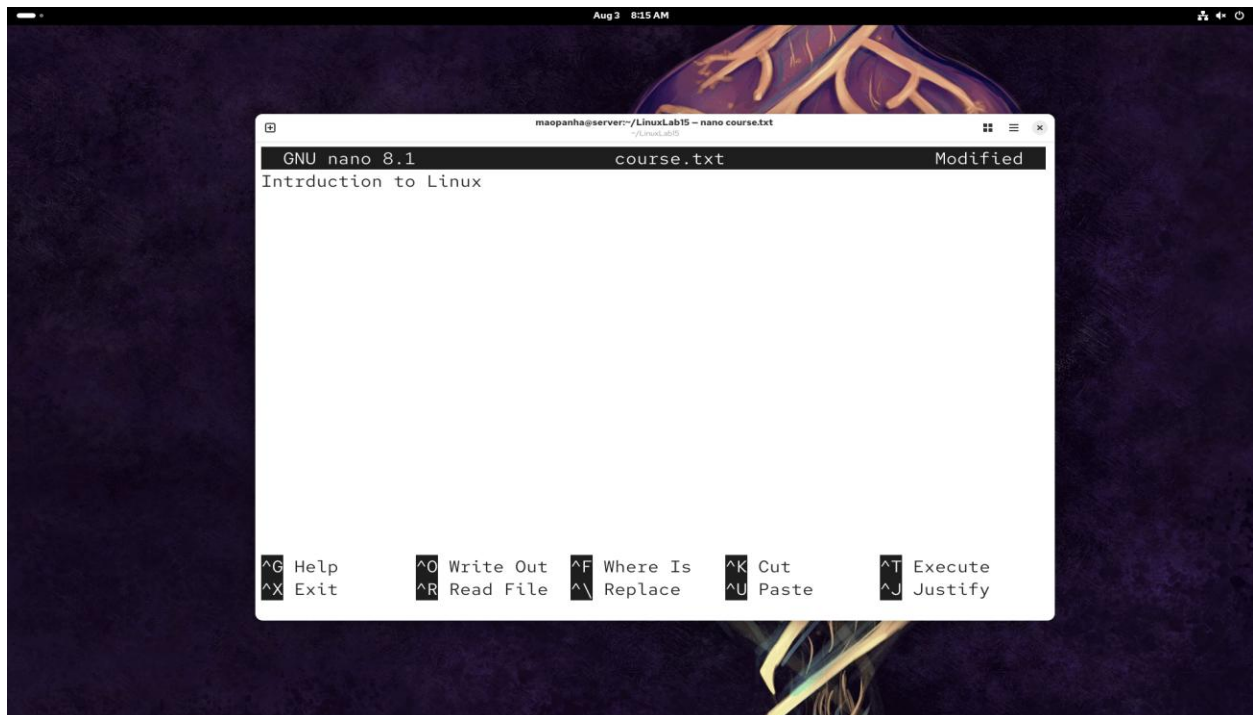
Linux Lab Exercise > student.txt



```
maopanha@server:~/LinuxLab15 - nano student.txt
GNU nano 8.1 student.txt Modified
Linux lab exercise

^G Help    ^O Write Out  ^F Where Is  ^K Cut      ^T Execute
^X Exit    ^R Read File  ^\ Replace   ^U Paste    ^J Justify
```

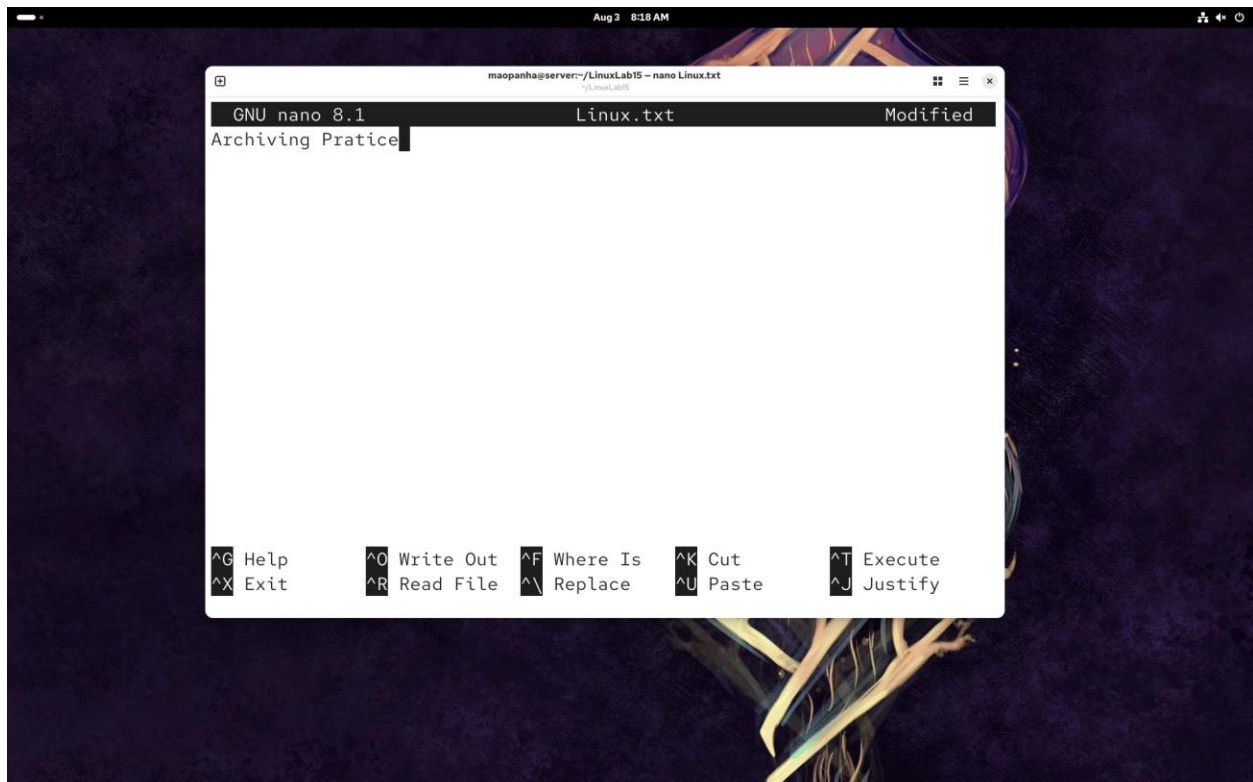
Introduction to Linux > course.txt



```
maopanha@server:~/LinuxLab15 - nano course.txt
GNU nano 8.1 course.txt Modified
Introdution to Linux

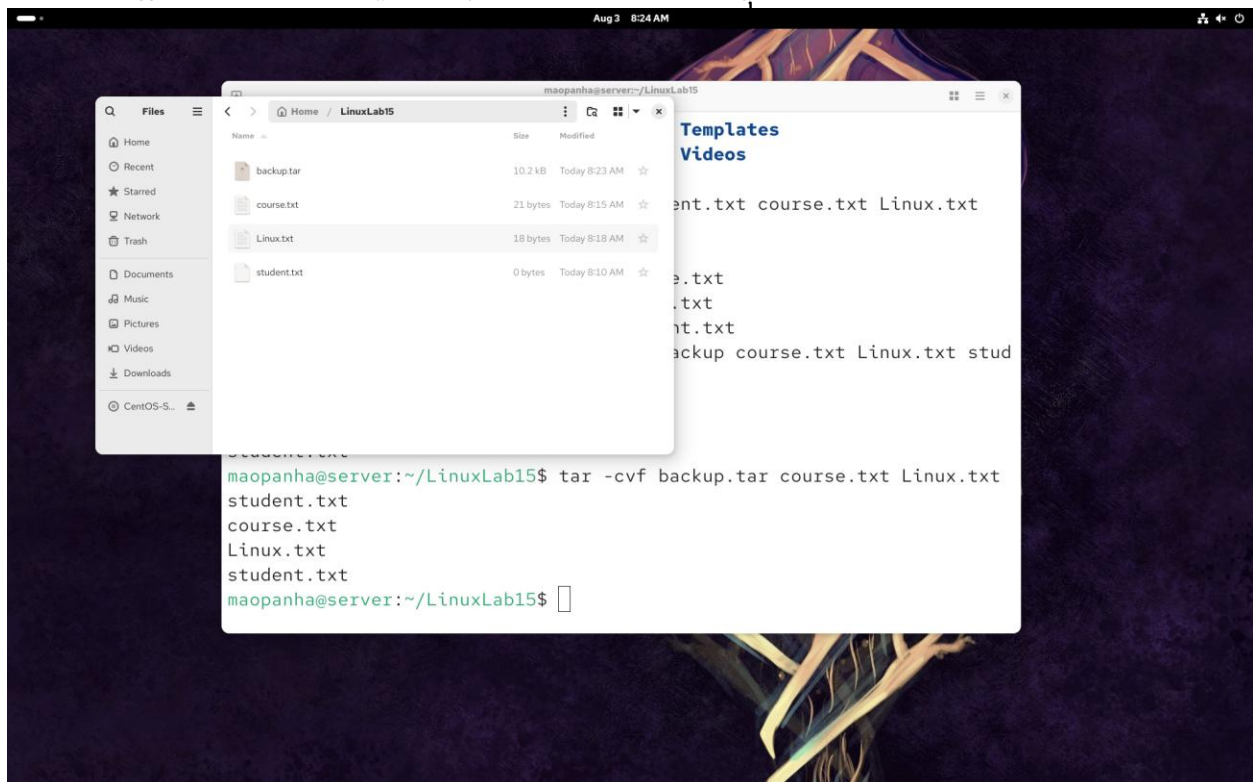
^G Help    ^O Write Out  ^F Where Is  ^K Cut      ^T Execute
^X Exit    ^R Read File  ^\ Replace   ^U Paste    ^J Justify
```

Archiving Practice > linux.txt



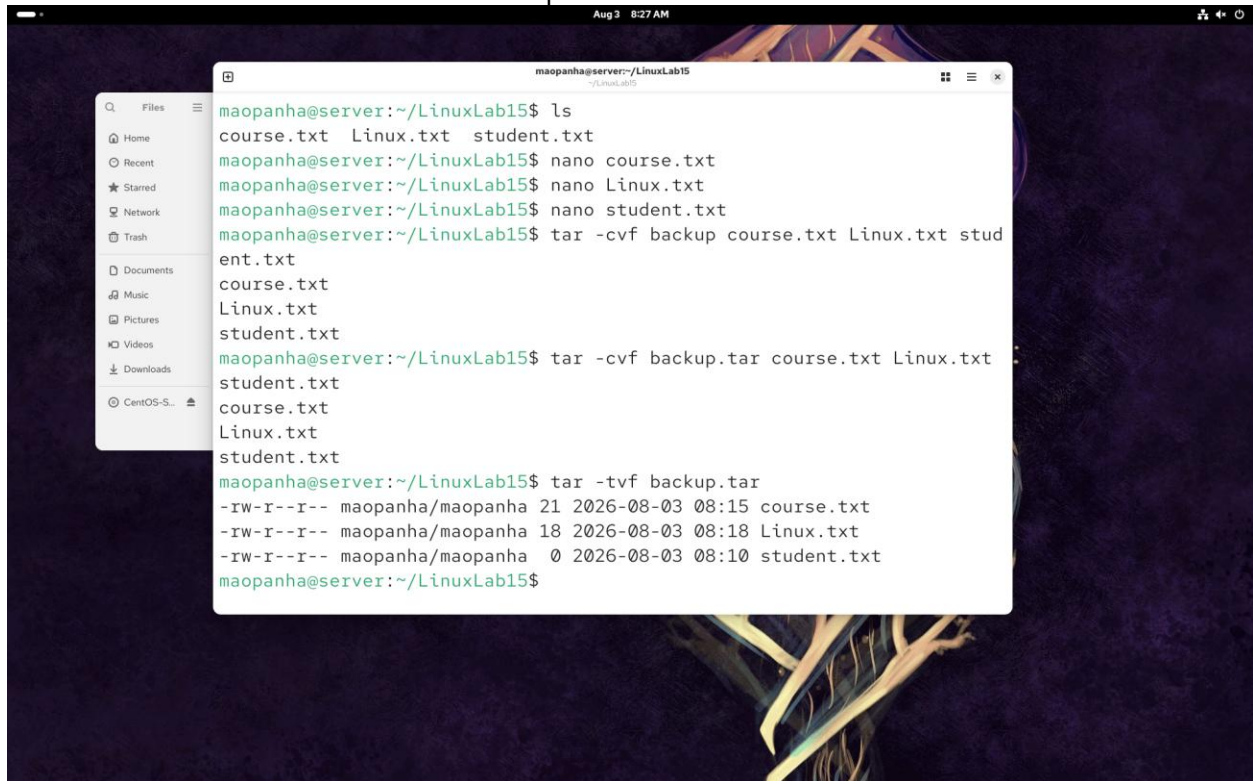
❖ លំហាត់ទី៣៖ បង្កើត Archive File (២ ពិន្ទុ)

បង្កើត Archive File មួយឈ្មោះ backup.tar ដែលផ្ទុក File ទាំង ៣។



❖ លំហាត់ទី៤៖ មើលមាតិកាខាងក្នុង Archive (១ ពិន្ទុ)

បង្ហាញ File ទាំងអស់ដែលមាននៅក្នុង backup.tar។

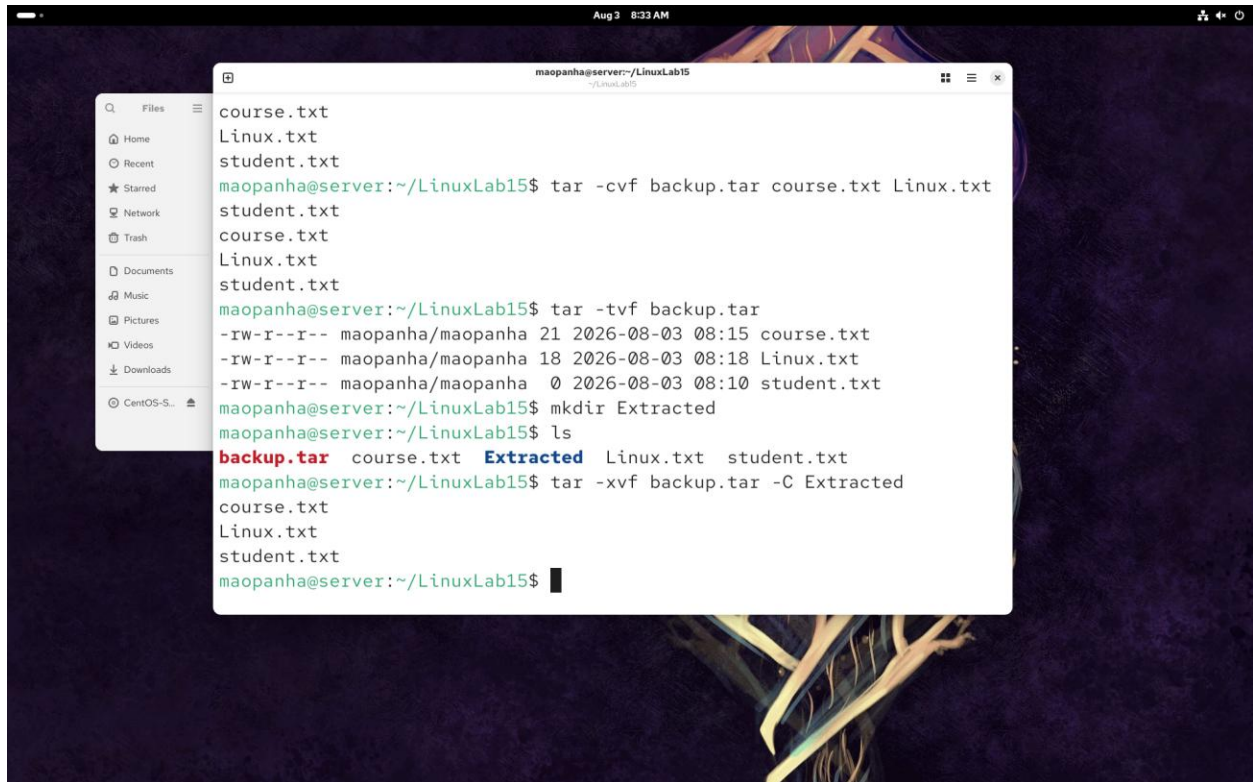


The screenshot shows a terminal window titled 'maopanha@server:~/LinuxLab15'. The user has created three text files: 'course.txt', 'Linux.txt', and 'student.txt'. They then created a tar archive named 'backup.tar' containing these files. Finally, they listed the contents of the archive using 'tar -tvf backup.tar', which shows the files and their permissions, sizes, and timestamps.

```
maopanha@server:~/LinuxLab15$ ls
course.txt  Linux.txt  student.txt
maopanha@server:~/LinuxLab15$ nano course.txt
maopanha@server:~/LinuxLab15$ nano Linux.txt
maopanha@server:~/LinuxLab15$ nano student.txt
maopanha@server:~/LinuxLab15$ tar -cvf backup course.txt Linux.txt student.txt
maopanha@server:~/LinuxLab15$ tar -cvf backup.tar course.txt Linux.txt student.txt
maopanha@server:~/LinuxLab15$ tar -tvf backup.tar
-rw-r--r-- maopanha/maopanha 21 2026-08-03 08:15 course.txt
-rw-r--r-- maopanha/maopanha 18 2026-08-03 08:18 Linux.txt
-rw-r--r-- maopanha/maopanha 0 2026-08-03 08:10 student.txt
maopanha@server:~/LinuxLab15$
```

❖ លំហាត់ទី៥៖ Extract Archive (១ ពិន្ទុ)

បង្កើត Folder មួយឈ្មោះ Extracted ហើយ Extract backup.tar ទៅក្នុង Folder នេះ។

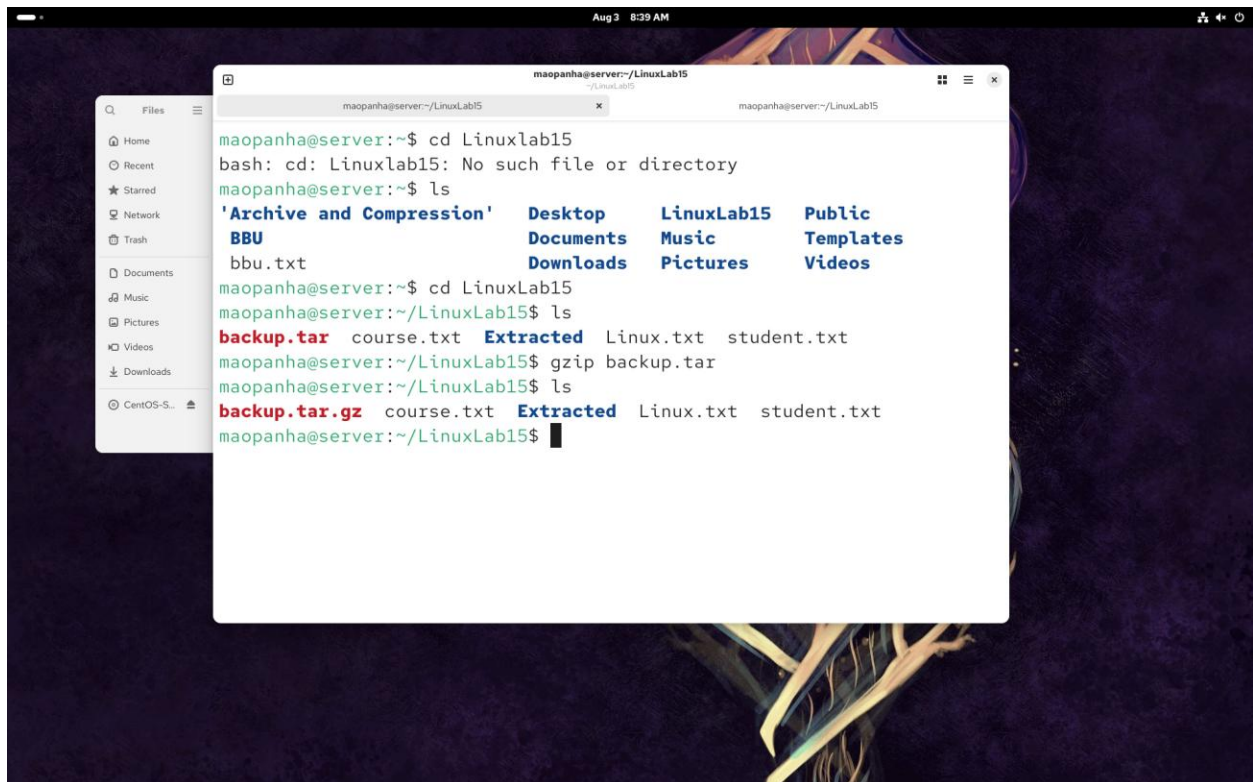


```
maopanha@server:~/LinuxLab15$  
course.txt  
Linux.txt  
student.txt  
maopanha@server:~/LinuxLab15$ tar -cvf backup.tar course.txt Linux.txt  
student.txt  
course.txt  
Linux.txt  
student.txt  
maopanha@server:~/LinuxLab15$ tar -tvf backup.tar  
-rw-r--r-- maopanha/maopanha 21 2026-08-03 08:15 course.txt  
-rw-r--r-- maopanha/maopanha 18 2026-08-03 08:18 Linux.txt  
-rw-r--r-- maopanha/maopanha 0 2026-08-03 08:10 student.txt  
maopanha@server:~/LinuxLab15$ mkdir Extracted  
maopanha@server:~/LinuxLab15$ ls  
backup.tar  course.txt  Extracted  Linux.txt  student.txt  
maopanha@server:~/LinuxLab15$ tar -xvf backup.tar -C Extracted  
course.txt  
Linux.txt  
student.txt  
maopanha@server:~/LinuxLab15$
```

❖ សំហាត់ទី៦៖ Compress ដោយប្រើ gzip (២ ពិន្ទុ)

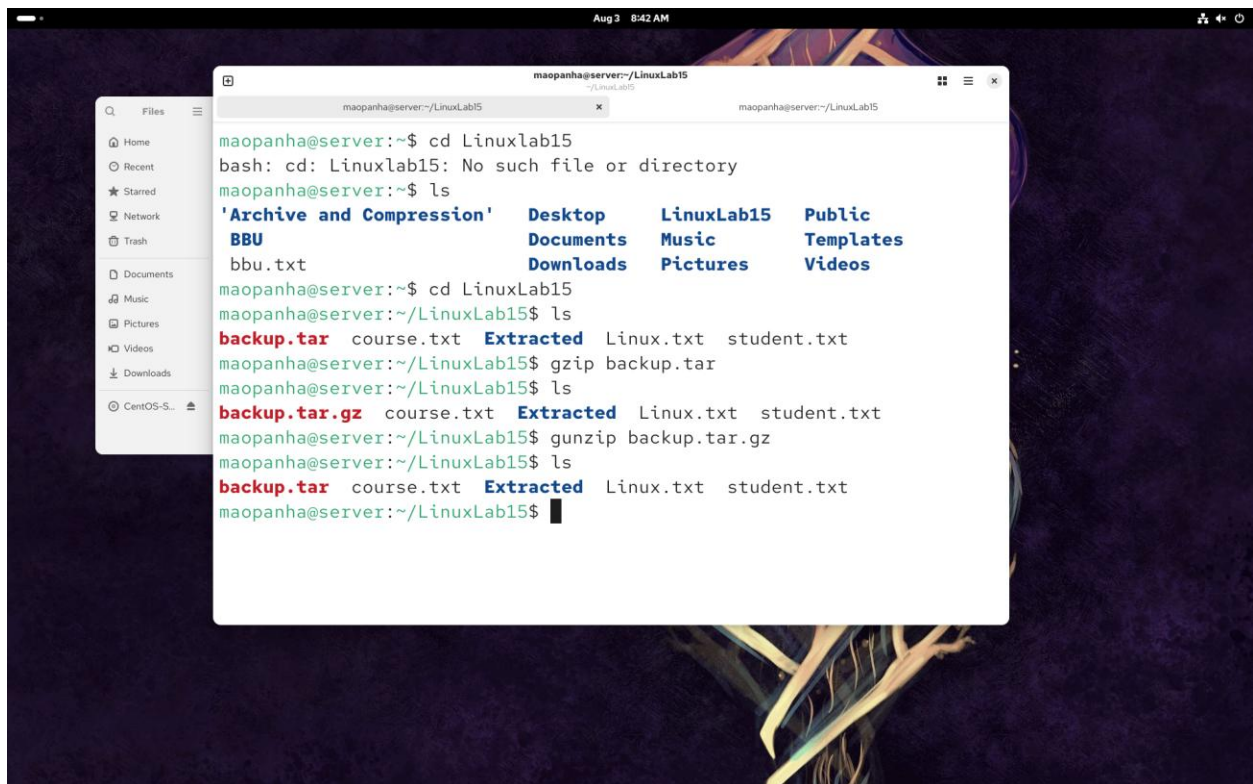
Compress backup.tar ដោយប្រើ gzip។

ផ្ទៀងផ្ទាត់ថា File បានប្តូរទៅជា៖ backup.tar.gz



❖ **លំហាត់ទី៧៖ Decompress gzip File (១ ពិន្ទុ)**

Restore backup.tar.gz ទៅជា backup.tar។

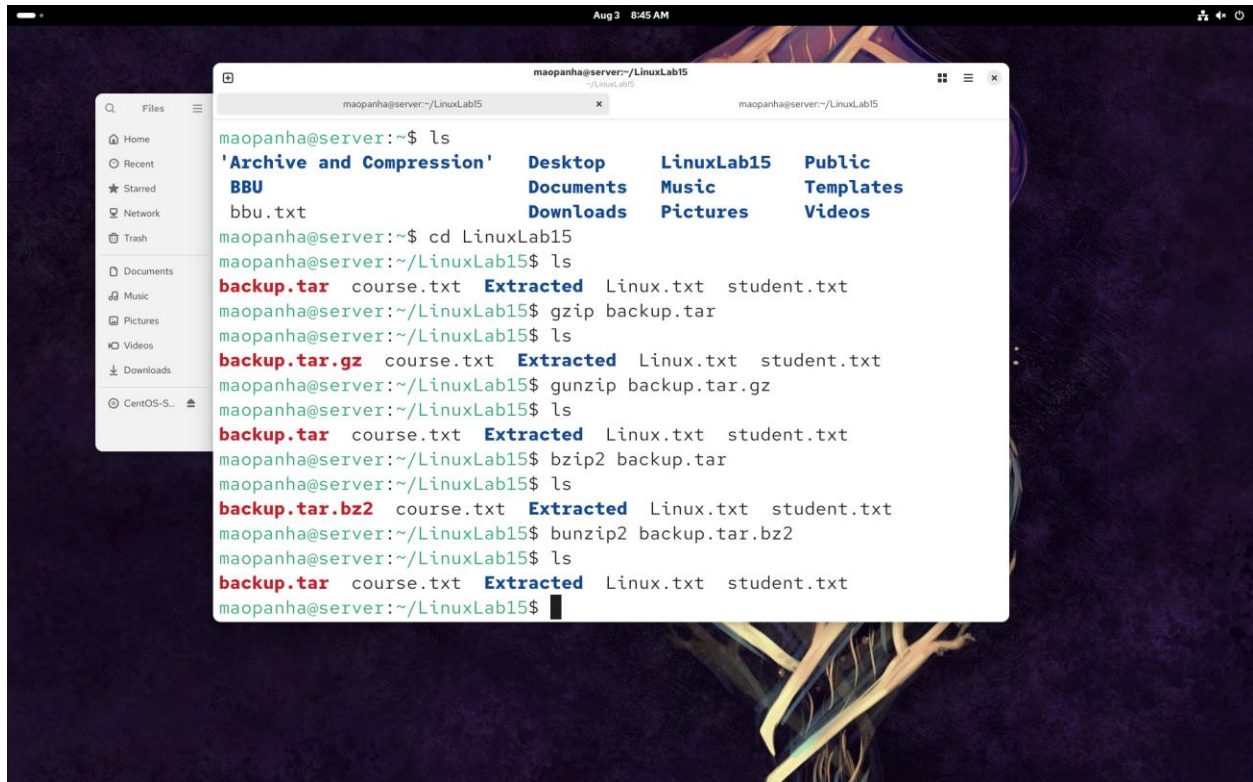


❖ លំហាត់ទី៨៖ Compress ដោយប្រើ bzip2 (២ ពិន្ទុ)

Compress backup.tar ដោយប្រើ bzip2។

ផ្ទៀងផ្ទាត់ថា File បានប្តូរទៅជា៖ backup.tar.bz2

បន្ទាប់មក Restore File មកវិញ។



```
maopanha@server:~$ ls
'Archive and Compression' Desktop LinuxLab15 Public
BBU Documents Music Templates
bbu.txt Downloads Pictures Videos

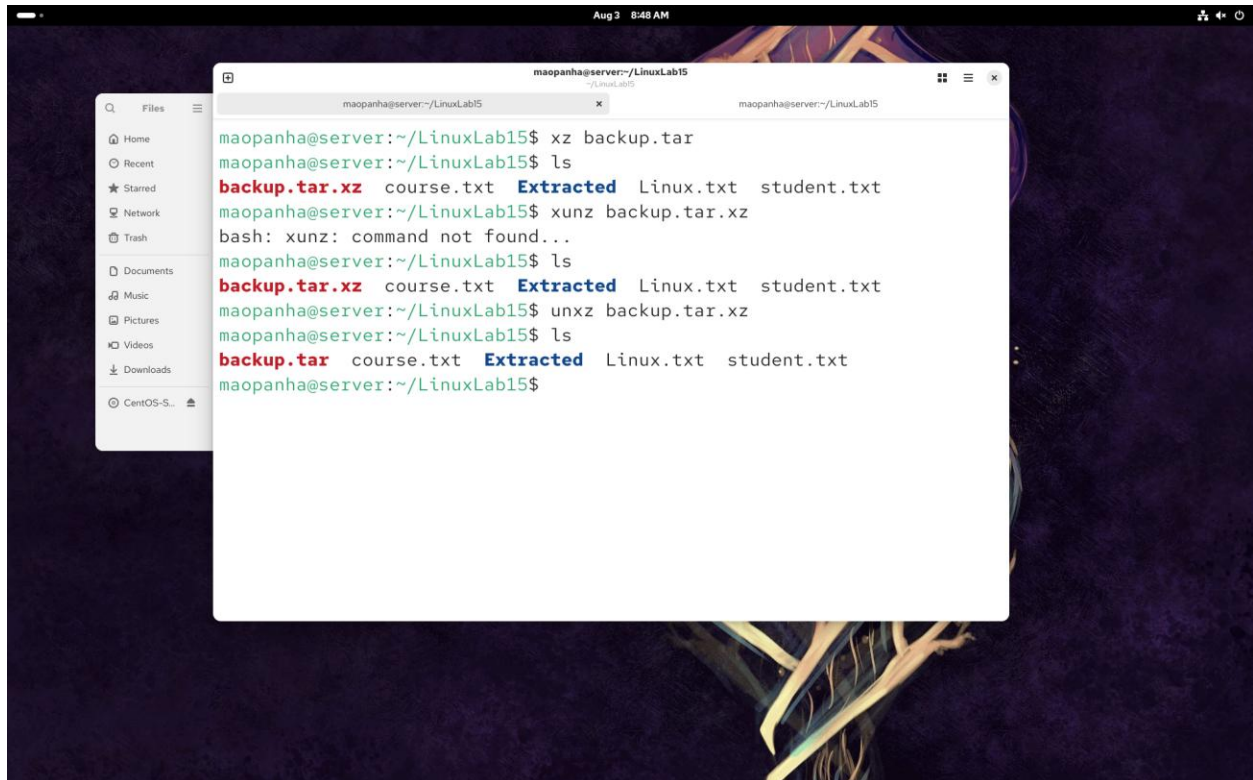
maopanha@server:~$ cd LinuxLab15
maopanha@server:~/LinuxLab15$ ls
backup.tar course.txt Extracted Linux.txt student.txt
maopanha@server:~/LinuxLab15$ gzip backup.tar
maopanha@server:~/LinuxLab15$ ls
backup.tar.gz course.txt Extracted Linux.txt student.txt
maopanha@server:~/LinuxLab15$ gunzip backup.tar.gz
maopanha@server:~/LinuxLab15$ ls
backup.tar course.txt Extracted Linux.txt student.txt
maopanha@server:~/LinuxLab15$ bzip2 backup.tar
maopanha@server:~/LinuxLab15$ ls
backup.tar.bz2 course.txt Extracted Linux.txt student.txt
maopanha@server:~/LinuxLab15$ bunzip2 backup.tar.bz2
maopanha@server:~/LinuxLab15$ ls
backup.tar course.txt Extracted Linux.txt student.txt
maopanha@server:~/LinuxLab15$
```

❖ លំហាត់ទី៩៖ Compress ដោយប្រើ xz (២ ពិន្ទុ)

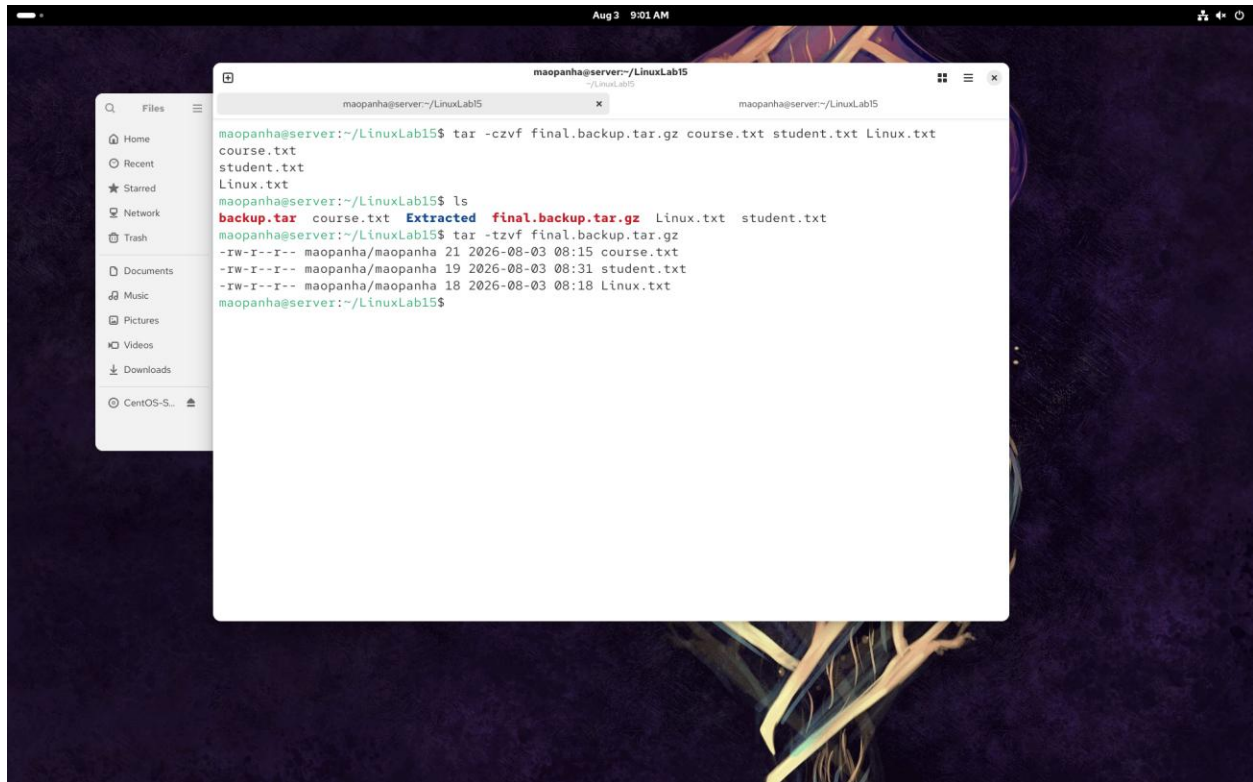
Compress backup.tar ដោយប្រើ xz។

ផ្ទៀងផ្ទាត់ថា File បានប្តូរទៅជា៖ backup.tar.xz

បន្ទាប់មក Restore File មកវិញ។



- ❖ លំហាត់ទី១០៖ បង្កើត Compressed Archive ដោយប្រើពាក្យបញ្ជាតែមួយ (២ ពិន្ទុ)
បង្កើត File ឈ្មោះ final_backup.tar.gz ដោយប្រើ Command តែមួយ។
បន្ទាប់មក ផ្ទៀងផ្ទាត់មាតិកាខាងក្នុង Archive។



ការដាក់ស្នើ

និស្សិតត្រូវចំពត Screenshot បង្ហាញលទ្ធផលដូចខាងក្រោម៖

1. Working Directory ត្រូវបានបង្កើត
2. Sample Files ទាំង ៣ ត្រូវបានបង្កើត
3. backup.tar
4. ការបង្ហាញមាតិកាខាងក្នុង Archive
5. ការធ្វើ Extract Archive
6. backup.tar.gz
7. backup.tar.bz2
8. backup.tar.xz
9. final_backup.tar.gz
10. ការផ្ទៀងផ្ទាត់ Archive ដោយប្រើ tar -tzvf