



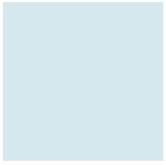
Introduction to Linux Systems

Bash and Shell Scripts

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Lab1: Personalize Primary Prompt

- Change the original style of the primary prompt with the following requirements:
 - New color
 - Extend with your student id
 - Replace “\$” with “#”
- Example:

```
liunx@VirtualBox:~$
```



```
liunx@VirtualBox-P12345678:~#
```



Lab2: Automated Uncompressing

- The given directory “Linux_Week5_Lab” has the following contents:

Linux_Week5_Lab/

- compressed_files/ (all .zip .rar .tar.gz and unknown files)
- student_id (the list of student id for uncompressing files)

```
liunx@VirtualBox:~/Linux_Week5_Lab$ ls  
compressed_files  student_id
```



Lab2: Automated Uncompressing

- Giving a bunch of compressing files named with student id, the files will be **.zip**, **.tar**, **.rar** and **unknown**.
- Using the student ID list to find out
 - who did not hand in files. (record into **missing_list**)
 - who hand in the incorrect file format. (record into **wrong_list**)

```
liunx@VirtualBox:~/Liunx_Week5_Lab/compressed_files$ ls
P10091040.zip      P18396343.dika    P26756678.tar.gz  P35547323.dika
P10138142.tar.gz   P18546236.zip     P26780897.rar     P35779840.zip
P10141482.tar.gz   P18700949.rar     P26781298.tar.gz  P35850824.zip
P10159028.zip      P18712104.zip     P26795519.dika    P35903115.dika
P10178862.tar.gz   P18745499.dika    P27243542.tar.gz  P36044007.dika
P10421072.zip      P18939784.zip     P27433719.dika    P36159072.zip
P10739882.tar.gz   P19083860.zip     P27440245.rar     P36279527.dika
P10912834.tar.gz   P19100823.dika    P27444351.dika    P36688837.rar
P10975653.rar      P19228357.rar     P27462814.tar.gz  P36704223.dika
P11035606.tar.gz   P19257355.dika    P27530760.zip     P36781942.tar.gz
```

```
liunx@VirtualBox:~/Liunx_Week5_Lab$ cat student_id
P84563590
P36159072
P53909738
P17244921
P35130347
P58075648
P19789379
P10421072
P60346858
P57182337
P85283367
P80923612
P46379543
P15226931
P21097326
P40457009
```

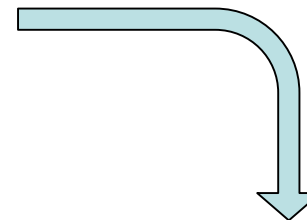


Lab2: Automated Uncompressing

- The files will be .zip, .tar, .rar and unknown, please classify them into four groups.
 - Uncompressing tool: `$ sudo apt install tar unzip unrar`
- Finally, compress them all except unknown files.

```
liunx@VirtualBox:~/Liunx_Week5_Lab/compressed_files$ ls
P10091040.zip      P18396343.dika    P26756678.tar.gz  P35547323.dika
P10138142.tar.gz   P18546236.zip     P26780897.rar     P35779840.zip
P10141482.tar.gz   P18700949.rar     P26781298.tar.gz  P35850824.zip
P10159028.zip      P18712104.zip     P26795519.dika    P35903115.dika
P10178862.tar.gz   P18745499.dika    P27243542.tar.gz  P36044007.dika
P10421072.zip      P18939784.zip     P27433719.dika    P36159072.zip
P10739882.tar.gz   P19083860.zip     P27440245.rar     P36279527.dika
P10912834.tar.gz   P19100823.dika    P27444351.dika    P36688837.rar
P10975653.rar      P19228357.rar     P27462814.tar.gz  P36704223.dika
P11035606.tar.gz   P19257355.dika    P27530760.zip     P36781942.tar.gz
```

After sorting

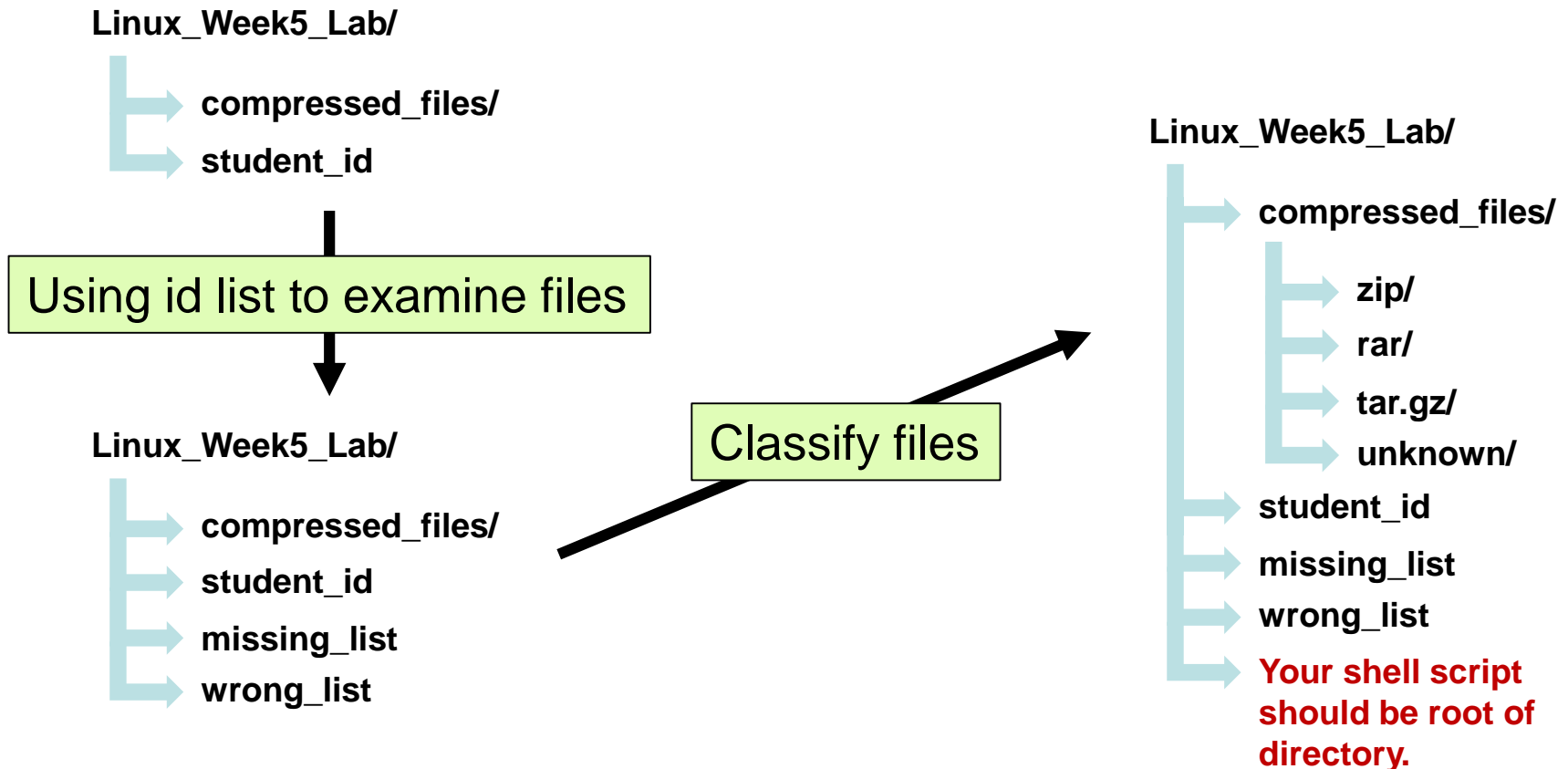


```
liunx@VirtualBox:~/Liunx_Week5_Lab/compressed_files$ ls
rar tar.gz unknown zip
```



Lab2: Automated Uncompressing

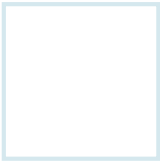
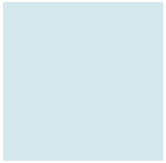
- The flow of overall steps and final directory tree.





Precautions in Demo

- Due Date (Upload in Moodle): **23:59 on 10/27 Tues.**
- Demo Time: **10:00-12:00 on 10/28 Wed.**
- Lab1 (20%)
- Lab2 (80%)
 - T.A. will prepare random test data for your shell script. (e.g. a new list of student id)
 - You may need to explain how your shell script works that facilitate T.A. scoring.



QUESTIONS