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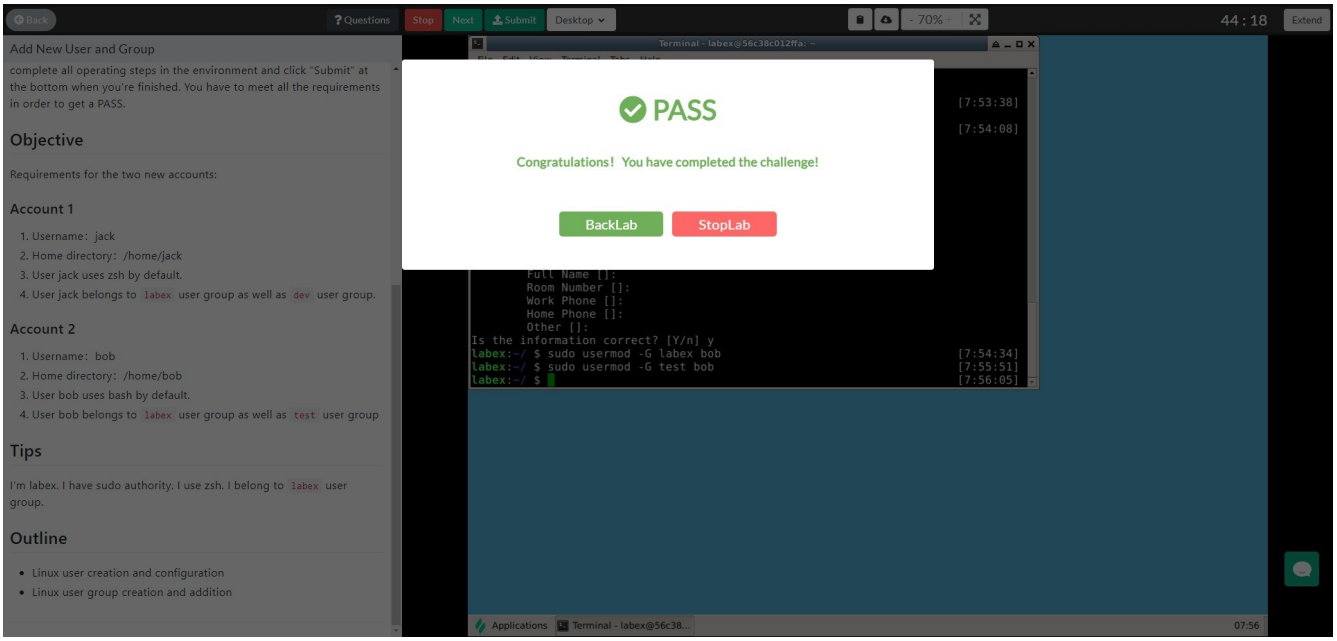
Kura Labs - Cohort 2

Challenge: Add New User and Group



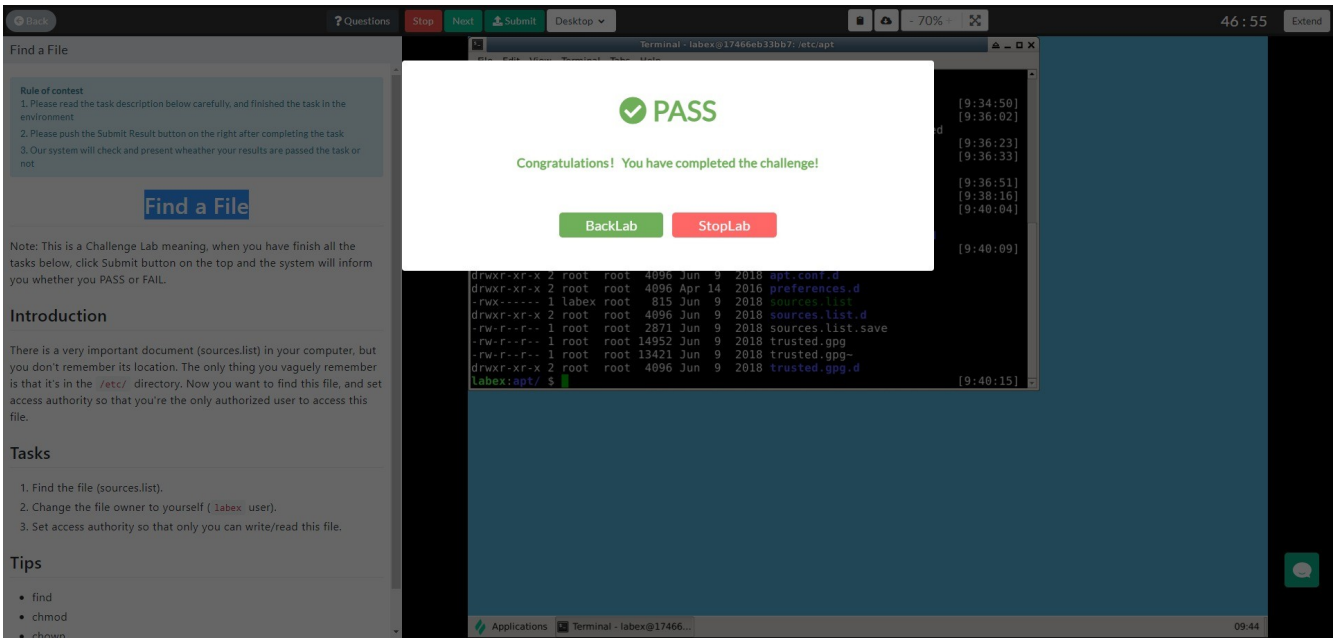
Account 1

1. Created the user and home directory for jack: sudo adduser jack
2. Set the default shell for jack to be zsh: sudo usermod --shell /bin/zsh jack
3. Added jack to labex group: sudo usermod -G labex jack
4. Created the user and home directory for dev: sudo adduser dev
5. Added jack to dev group: sudo usermod -G dev jack

Account 2

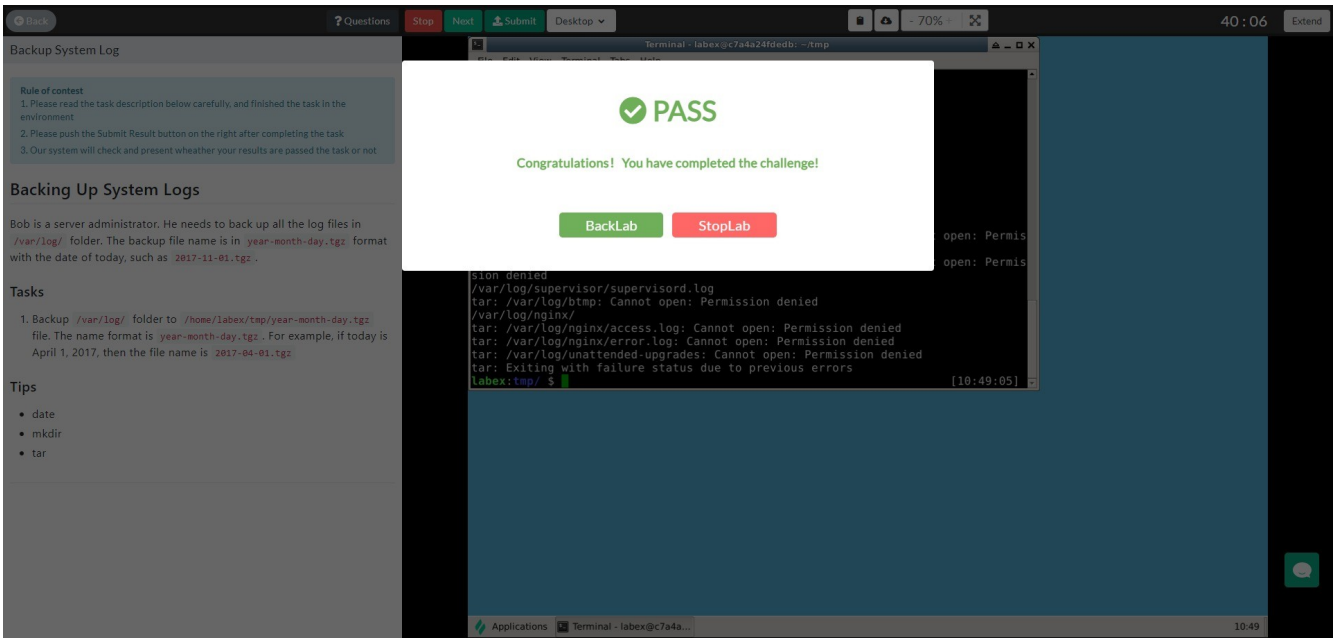
6. Created the user and home directory for bob: sudo adduser bob
7. Set the default shell for bob to be bash: sudo usermod --shell /bin/bash bob
8. Added bob to labex group: sudo usermod -G labex bob
9. Created the user and home directory for test: sudo adduser test
10. Added bob to test group: sudo usermod -G test bob

Challenge: Find a File



1. Find the file: sudo find /etc -name sources.list
2. Make labex the file owner: sudo chown labex sources.list
3. Make it so only labex can read or write to this file: chmod 700 sources.list

Challenge: Backing Up System Logs



1. Make tmp directory: mkdir tmp
2. Backup var/log folder to /home/labex/tmp/year-month-day.tgz: tar -czvf home/labex/tmp/$(date +%Y-%m-%d).tgz varlog

Challenge: Analyze Historical Commands

Downloaded the file as instructed.

wget https://labexfile.oss-us-west-1-internal.aliyuncs.com/courses/1/data1

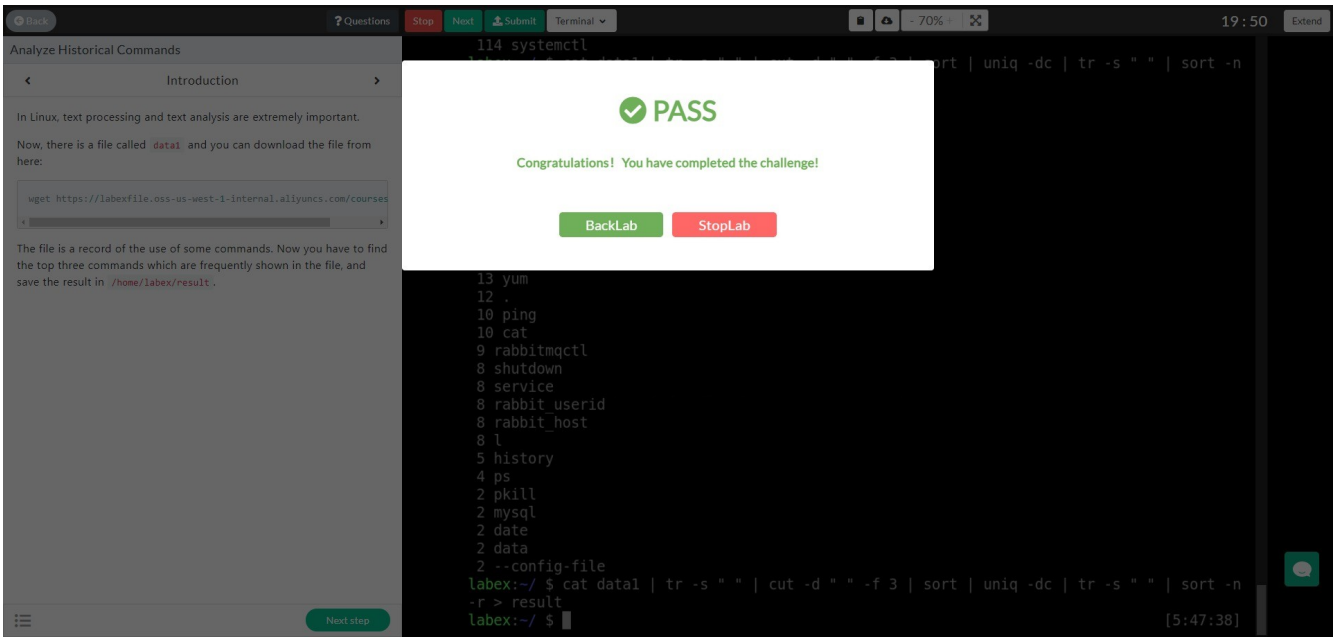
Read the data file, remove consecutive spaces, extracted the 3rd field from each line (the command), sorted the list alphabetically, pulled all the commands repeated in the list and display the frequency of each one, remove consecutive spaces again, sort this list in reverse numerical order, extract the top three lines, and finally, save to fine named data1 in the current directory.

cat data1 | tr -s " " | cut -d " " -f 3 | sort | uniq -dc | tr -s " " | sort -n -r | head -3 > result

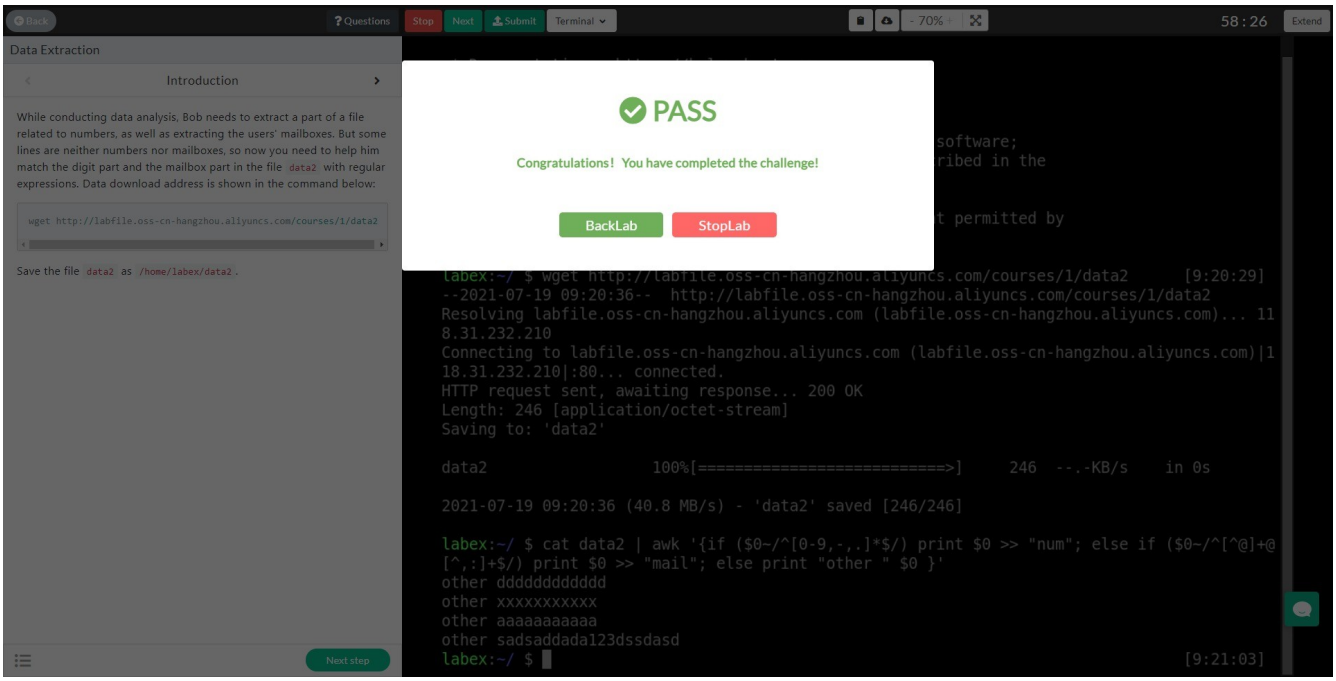
This brought back the required results of the top three lines. However, this failed the check.

Instead, I had to list all the commands instead of just the first three lines in order to get the check to pass which is not what the instructions required.

cat data1 | tr -s " " | cut -d " " -f 3 | sort | uniq -dc | tr -s " " | sort -n -r > result



Challenge: Data Extraction



From within the /home/labex directory, I downloaded the file as instructed.

wget http://labfile.oss-cn-hangzhou.aliyuncs.com/courses/1/data2

I used the awk command with an if/else statement to extract the data and save in different files (numbers to “num” and email addresses to “mail”).

The command algorithm was as follows:

- if the contents of the line is a number, append the line to the “num” file (which is created if it does not exist)
- else, if it is an email, append the line to the “mail” file (which is created if it does not exist)
- otherwise, output “other ” followed by the line.
- At the end of the command is the “data2” file which contains the data which is being processed

awk '{if ($0~/^[0-9,-,.]*$/) print $0 >> "num"; else if ($0~/^[^@]+@[^,:]+$/) print $0 >> "mail"; else print "other " $0 }' data2