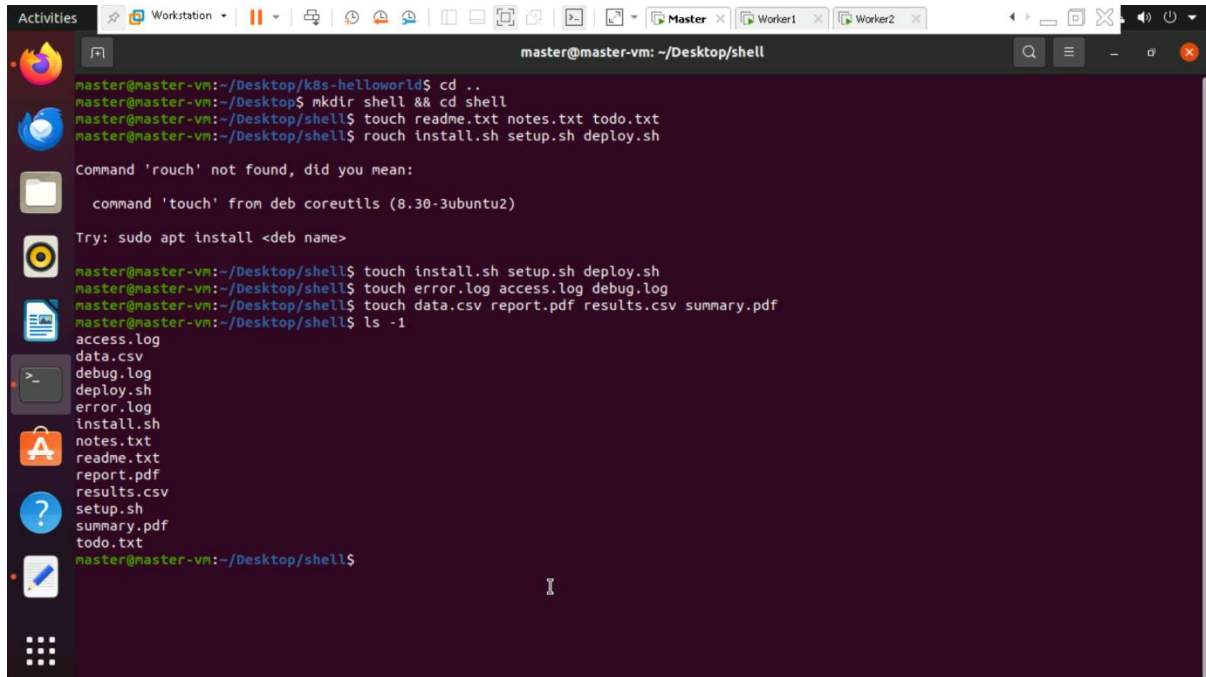


Q. Shell script based file organizer

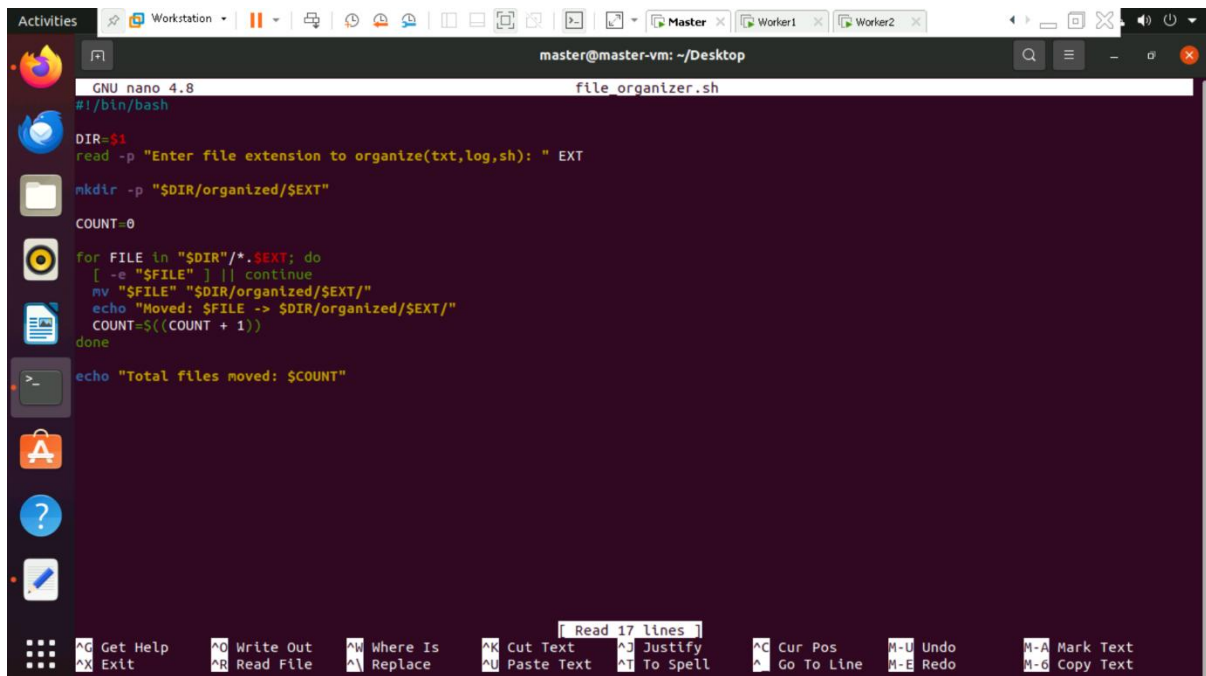
[devops-commontrack-mocktest/question2 at main · KPkm25/devops-commontrack-mocktest](#)

1. Create a bunch of sample files with different extensions to be organized



```
master@master-vm: ~/Desktop/shell
master@master-vm:~/Desktop/k8s-helloworld$ cd ..
master@master-vm:~/Desktop$ mkdir shell && cd shell
master@master-vm:~/Desktop/shell$ touch readme.txt notes.txt todo.txt
master@master-vm:~/Desktop/shell$ rouch install.sh setup.sh deploy.sh
Command 'rouch' not found, did you mean:
  command 'touch' from deb coreutils (8.30-3ubuntu2)
Try: sudo apt install <deb name>
master@master-vm:~/Desktop/shell$ touch install.sh setup.sh deploy.sh
master@master-vm:~/Desktop/shell$ touch error.log access.log debug.log
master@master-vm:~/Desktop/shell$ touch data.csv report.pdf results.csv summary.pdf
master@master-vm:~/Desktop/shell$ ls -l
-rw-rw-r-- 1 master master 0 Oct 10 12:34 access.log
-rw-rw-r-- 1 master master 0 Oct 10 12:34 data.csv
-rw-rw-r-- 1 master master 0 Oct 10 12:34 debug.log
-rw-rw-r-- 1 master master 0 Oct 10 12:34 deploy.sh
-rw-rw-r-- 1 master master 0 Oct 10 12:34 error.log
-rw-rw-r-- 1 master master 0 Oct 10 12:34 install.sh
-rw-rw-r-- 1 master master 0 Oct 10 12:34 notes.txt
-rw-rw-r-- 1 master master 0 Oct 10 12:34 readme.txt
-rw-rw-r-- 1 master master 0 Oct 10 12:34 report.pdf
-rw-rw-r-- 1 master master 0 Oct 10 12:34 results.csv
-rw-rw-r-- 1 master master 0 Oct 10 12:34 setup.sh
-rw-rw-r-- 1 master master 0 Oct 10 12:34 summary.pdf
-rw-rw-r-- 1 master master 0 Oct 10 12:34 todo.txt
master@master-vm:~/Desktop/shell$
```

2. Create a file_organizer.sh shell script to organize the files



```
GNU nano 4.8 file_organizer.sh
#!/bin/bash

DIR=$1
read -p "Enter file extension to organize(txt,log,sh): " EXT

mkdir -p "$DIR/organized/$EXT"

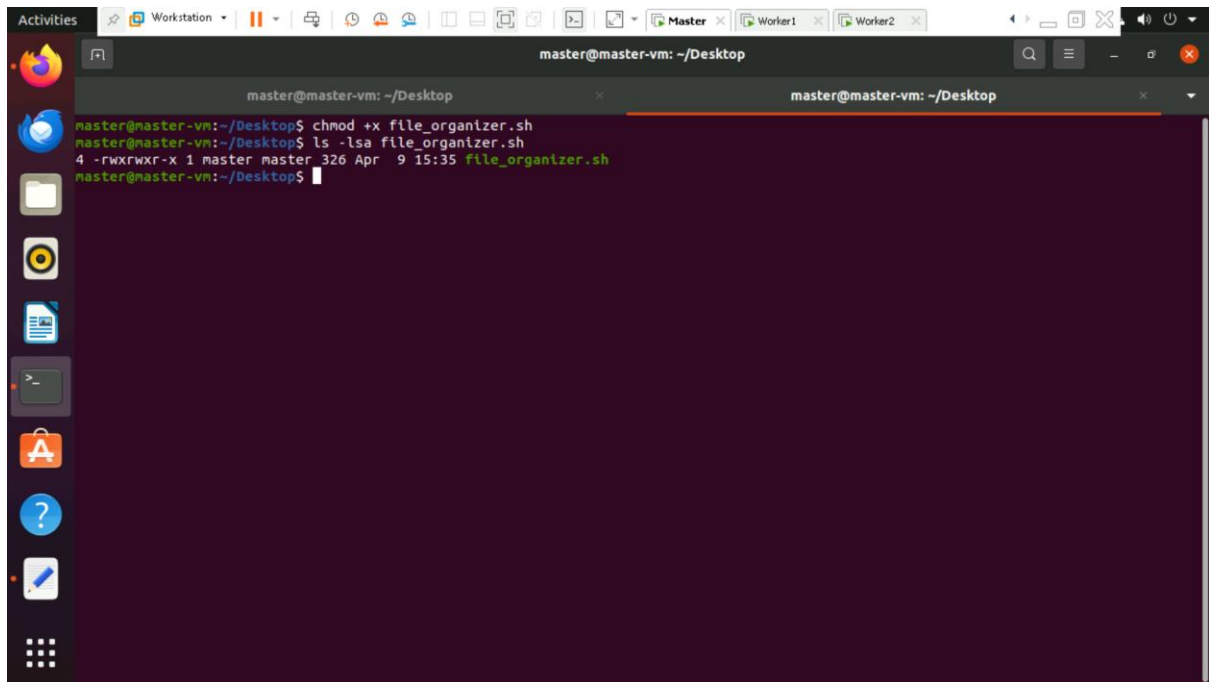
COUNT=0

for FILE in "$DIR"/*.${EXT}; do
  [ -e "$FILE" ] || continue
  mv "$FILE" "$DIR/organized/$EXT/"
  echo "Moved: $FILE -> $DIR/organized/$EXT/"
  COUNT=$((COUNT + 1))
done

echo "Total files moved: $COUNT"
```

This script will take in a directory as a user input and organize all the files containing the provided extension in separate folders.

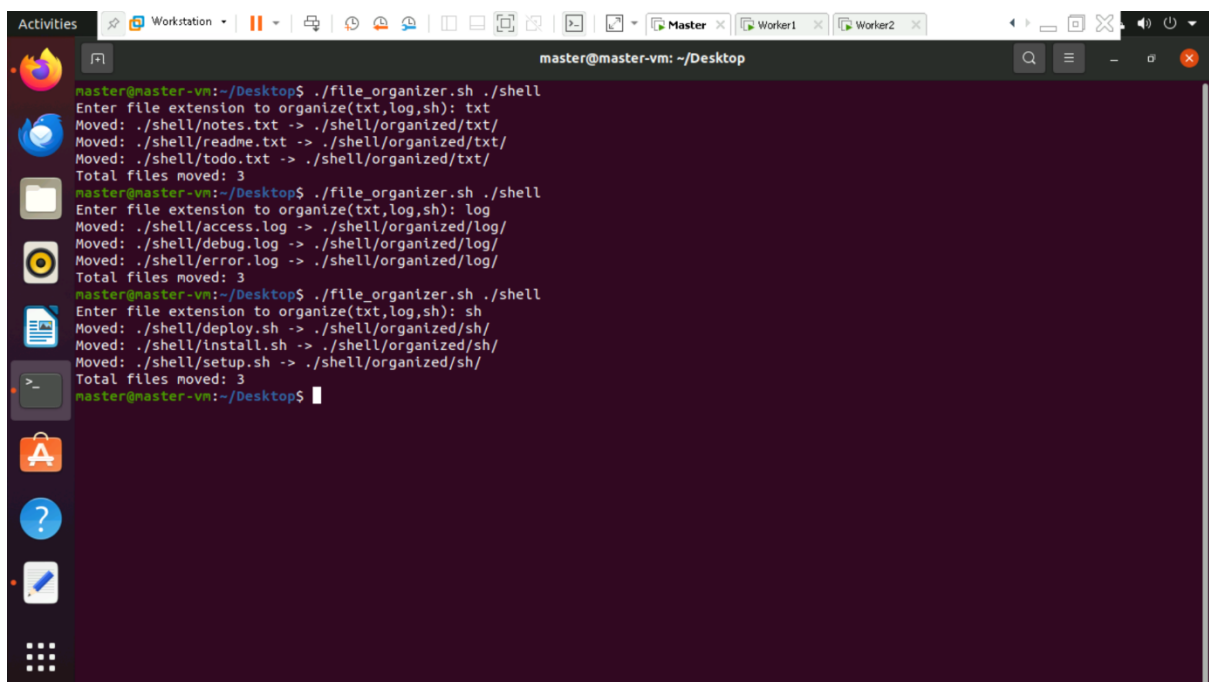
3. Give executable permission to file_organizer.sh



A terminal window titled 'master@master-vm: ~/Desktop' showing the execution of a script. The user runs 'chmod +x file_organization.sh' and then 'ls -lsa file_organization.sh', which shows the file permissions as '-rwxrwxr-x 1 master master 326 Apr 9 15:35 file_organization.sh'. The terminal has a dark purple background and a sidebar with application icons on the left.

```
master@master-vm: ~/Desktop
master@master-vm:~/Desktop$ chmod +x file_organization.sh
master@master-vm:~/Desktop$ ls -lsa file_organization.sh
4 -rwxrwxr-x 1 master master 326 Apr 9 15:35 file_organization.sh
master@master-vm:~/Desktop$
```

4. Execute the script for 3 types of extensions, i.e, txt,log and sh.



A terminal window titled 'master@master-vm: ~/Desktop' showing the execution of the script for three different file extensions. The user runs './file_organization.sh ./shell' three times, each time prompted to enter a file extension (txt, log, sh). The script moves files from the specified directory to corresponding subdirectories (txt, log, sh) under the 'organized' folder. For each extension, 3 files are moved.

```
master@master-vm:~/Desktop$ ./file_organization.sh ./shell
Enter file extension to organize(txt,log,sh): txt
Moved: ./shell/notes.txt -> ./shell/organized/txt/
Moved: ./shell/readme.txt -> ./shell/organized/txt/
Moved: ./shell/todo.txt -> ./shell/organized/txt/
Total files moved: 3
master@master-vm:~/Desktop$ ./file_organization.sh ./shell
Enter file extension to organize(txt,log,sh): log
Moved: ./shell/access.log -> ./shell/organized/log/
Moved: ./shell/debug.log -> ./shell/organized/log/
Moved: ./shell/error.log -> ./shell/organized/log/
Total files moved: 3
master@master-vm:~/Desktop$ ./file_organization.sh ./shell
Enter file extension to organize(txt,log,sh): sh
Moved: ./shell/deploy.sh -> ./shell/organized/sh/
Moved: ./shell/install.sh -> ./shell/organized/sh/
Moved: ./shell/setup.sh -> ./shell/organized/sh/
Total files moved: 3
master@master-vm:~/Desktop$
```

5. The script will move the files to their respective folders and leave the remaining files untouched.

The screenshot shows a Linux desktop with a dark theme. The top panel includes an 'Activities' button, a search bar, and several open applications: 'Workstation', a file manager, and three browser windows ('Master', 'Worker1', 'Worker2'). The left sidebar contains icons for the Dash, Home, Applications, and a grid of installed applications. The terminal window, titled 'master@master-vm: ~/Desktop/shell/organized', displays the following commands and output:

```

master@master-vm:~/Desktop$ cd shell/
master@master-vm:~/Desktop/shell$ ls
data.csv  organized  report.pdf  results.csv  summary.pdf
master@master-vm:~/Desktop/shell$ cd organized/
master@master-vm:~/Desktop/shell/organized$ ls
log  sh  txt
master@master-vm:~/Desktop/shell/organized$ ls log/ -l
-rw-rw-r-- 1 master master 0 Nov 19 12:00 access.log
-rw-rw-r-- 1 master master 0 Nov 19 12:00 debug.log
-rw-rw-r-- 1 master master 0 Nov 19 12:00 error.log
master@master-vm:~/Desktop/shell/organized$ ls sh -l
-rw-rw-r-- 1 master master 0 Nov 19 12:00 deploy.sh
-rw-rw-r-- 1 master master 0 Nov 19 12:00 install.sh
-rw-rw-r-- 1 master master 0 Nov 19 12:00 setup.sh
master@master-vm:~/Desktop/shell/organized$ ls txt -l
-rw-rw-r-- 1 master master 0 Nov 19 12:00 notes.txt
-rw-rw-r-- 1 master master 0 Nov 19 12:00 readme.txt
-rw-rw-r-- 1 master master 0 Nov 19 12:00 todo.txt
master@master-vm:~/Desktop/shell/organized$

```