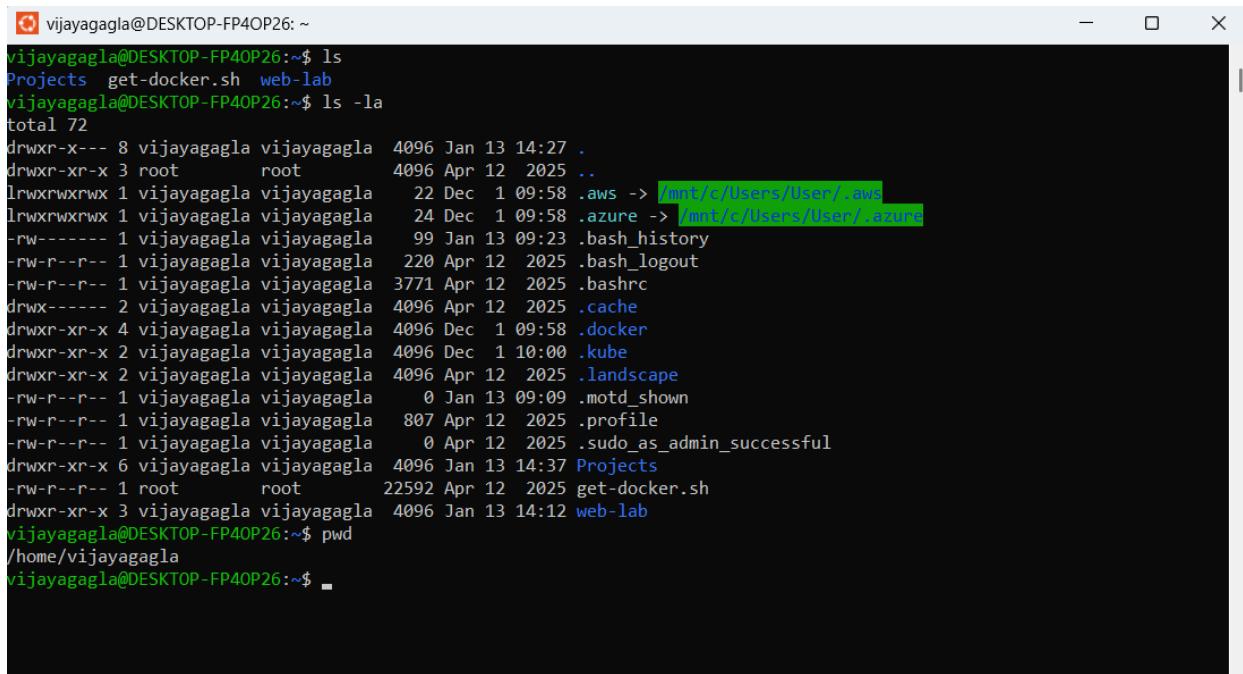
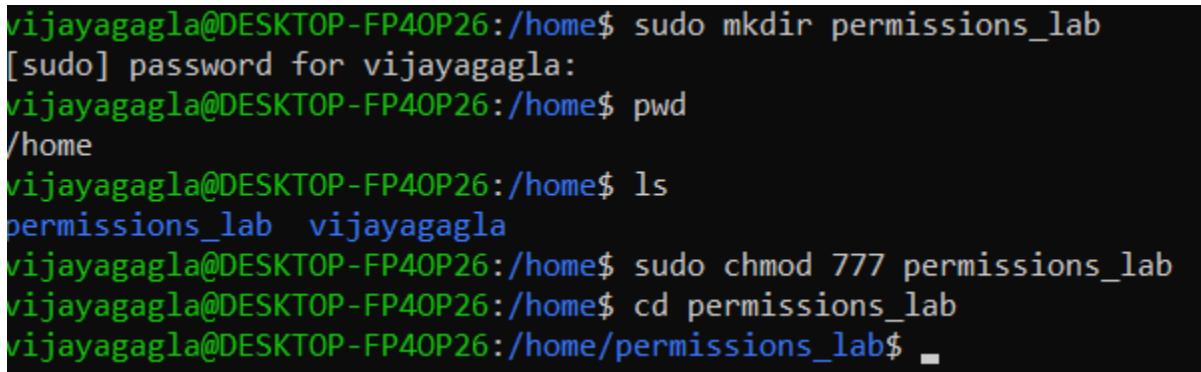


# Set Up Lab Workspace



```
vijayagagla@DESKTOP-FP4OP26:~$ ls
Projects  get-docker.sh  web-lab
vijayagagla@DESKTOP-FP4OP26:~$ ls -la
total 72
drwxr-x--- 8 vijayagagla vijayagagla 4096 Jan 13 14:27 .
drwxr-xr-x  3 root      root      4096 Apr 12 2025 ..
lrwxrwxrwx  1 vijayagagla vijayagagla  22 Dec  1 09:58 .aws -> /mnt/c/Users/User/.aws
lrwxrwxrwx  1 vijayagagla vijayagagla  24 Dec  1 09:58 .azure -> /mnt/c/Users/User/.azure
-rw-------  1 vijayagagla vijayagagla  99 Jan 13 09:23 .bash_history
-rw-r--r--  1 vijayagagla vijayagagla 220 Apr 12 2025 .bash_logout
-rw-r--r--  1 vijayagagla vijayagagla 3771 Apr 12 2025 .bashrc
drwx----- 2 vijayagagla vijayagagla 4096 Apr 12 2025 .cache
drwxr-xr-x  4 vijayagagla vijayagagla 4096 Dec  1 09:58 .docker
drwxr-xr-x  2 vijayagagla vijayagagla 4096 Dec  1 10:00 .kube
drwxr-xr-x  2 vijayagagla vijayagagla 4096 Apr 12 2025 .landscape
-rw-r--r--  1 vijayagagla vijayagagla     0 Jan 13 09:09 .motd_shown
-rw-r--r--  1 vijayagagla vijayagagla 807 Apr 12 2025 .profile
-rw-r--r--  1 vijayagagla vijayagagla     0 Apr 12 2025 .sudo_as_admin_successful
drwxr-xr-x  6 vijayagagla vijayagagla 4096 Jan 13 14:37 Projects
-rw-r--r--  1 root      root      22592 Apr 12 2025 get-docker.sh
drwxr-xr-x  3 vijayagagla vijayagagla 4096 Jan 13 14:12 web-lab
vijayagagla@DESKTOP-FP4OP26:~$ pwd
/home/vijayagagla
vijayagagla@DESKTOP-FP4OP26:~$
```



```
vijayagagla@DESKTOP-FP4OP26:/home$ sudo mkdir permissions_lab
[sudo] password for vijayagagla:
vijayagagla@DESKTOP-FP4OP26:/home$ pwd
/home
vijayagagla@DESKTOP-FP4OP26:/home$ ls
permissions_lab  vijayagagla
vijayagagla@DESKTOP-FP4OP26:/home$ sudo chmod 777 permissions_lab
vijayagagla@DESKTOP-FP4OP26:/home$ cd permissions_lab
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$
```

## Create & Run Your First Script

```
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ nano script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ cat script.sh
#!/usr/bin/env bash
echo "Hello, this script is running as $(whoami)!"
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ nano script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ ls -l script.sh
-rw-r--r-- 1 vijayagagla vijayagagla 71 Jan 13 15:00 script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ chmod u+x script.sh    # u = user (owner)
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ ls -l script.sh
-rwxr--r-- 1 vijayagagla vijayagagla 71 Jan 13 15:00 script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ ./script.sh
Hello, this script is running as vijayagagla!
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ _
```

```
Hello, this script is running as vijayagagla!
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ chmod u-x script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ ./script.sh
bash: ./script.sh: Permission denied
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ chmod u+x script.sh    # u = user (owner)
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ chmod 755 script.sh      # rwx r-x r-x
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ chmod u-w script.sh     # now r-x r-x r-x (555)
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ nano script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ nano script.sh
vijayagagla@DESKTOP-FP40P26:/home/permissions_lab$ _
```

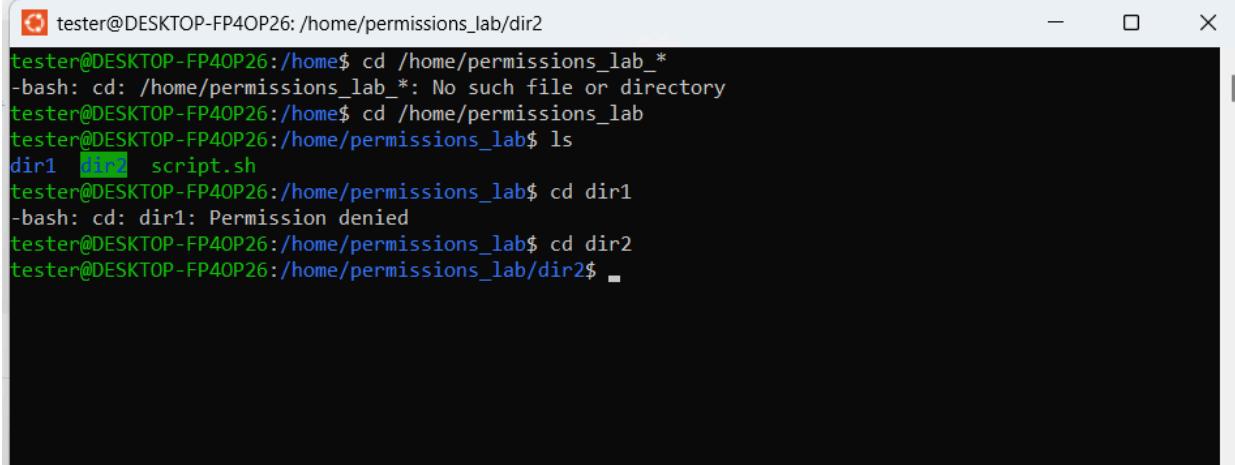
```
vijayagagla@DESKTOP-FP4OP26: /home/permissions_lab
GNU nano 7.2                                     script.sh
#!/usr/bin/env bash
echo "Hello, this script is running as $(whoami)!"
```

[ File 'script.sh' is unwritable ]

**^G** Help **^O** Write Out **^W** Where Is **^K** Cut **^T** Execute **^C** Location **M-U** Undo  
**^X** Exit **^R** Read File **^\\** Replace **^U** Paste **^J** Justify **^/** Go To Line **M-E** Redo

## Directory Permissions Quick Demo

Tester User Permissions



```
tester@DESKTOP-FP4OP26:/home/permissions_lab$ cd /home/permissions_lab/*  
-bash: cd: /home/permissions_lab_*: No such file or directory  
tester@DESKTOP-FP4OP26:/home$ cd /home/permissions_lab  
tester@DESKTOP-FP4OP26:/home/permissions_lab$ ls  
dir1 dir2 script.sh  
tester@DESKTOP-FP4OP26:/home/permissions_lab$ cd dir1  
-bash: cd: dir1: Permission denied  
tester@DESKTOP-FP4OP26:/home/permissions_lab$ cd dir2  
tester@DESKTOP-FP4OP26:/home/permissions_lab/dir2$
```

## 7.1 script\_list.sh — list both dirs

```
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab/dir1$ cd ..  
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ nano script_list.sh  
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ chmod +x script_list.sh  
./script_list.sh  
\nContents of dir1:  
script_list.sh script_move.sh  
\nContents of dir2:  
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$
```

## 7.2 script\_move.sh — move file1 → dir2

```
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ touch dir1/file1.txt
echo "moving..." > dir1/file1.txt

nano script_move.sh
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ cat script_move.sh
#!/usr/bin/env bash
mv dir1/file1.txt dir2/
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ chmod +x script_move.sh
./script_move.sh
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ ls dir2
file1.txt
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ -
```

### 7.3 cleanup.sh — delete \*.txt

```
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ nano cleanup.sh
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ chmod +x cleanup.sh
./cleanup.sh
removed 'dir2/file1.txt'
vijayagagla@DESKTOP-FP4OP26:/home/permissions_lab$ -
```