

Jaleel Williamson

jayw-713

CSCI 400 Lab 4

9/10/25

Linux Luminarium

Perceiving Permissions

<https://pwn.college/linux-luminarium/permissions/>

- **Changing File Ownership**

```
hacker@permissions~changing-file-ownership:~$ chown /home/hacker
chown: missing operand after '/home/hacker'
Try 'chown --help' for more information.
hacker@permissions~changing-file-ownership:~$ chown /home/hacker /flag
chown: invalid user: '/home/hacker'
hacker@permissions~changing-file-ownership:~$ chown/hacker /flag
bash: chown/hacker: No such file or directory
hacker@permissions~changing-file-ownership:~$ chown /hacker /flag
chown: invalid user: '/hacker'
hacker@permissions~changing-file-ownership:~$ chown hacker /flag
hacker@permissions~changing-file-ownership:~$ cat /flag
pwn.college{UFJtWsy82TWS-IGL7bc3NVqBpW5.QXxEjN0wCO2kjMzEzW}
hacker@permissions~changing-file-ownership:~$
```

Terminal

Flag

```
hacker@permissions~changing-file-ownership:~$ chown /home/hacker
chown: missing operand after '/home/hacker'
Try 'chown --help' for more information.
hacker@permissions~changing-file-ownership:~$ chown /home/hacker /flag
chown: invalid user: '/home/hacker'
hacker@permissions~changing-file-ownership:~$ chown/hacker /flag
bash: chown/hacker: No such file or directory
hacker@permissions~changing-file-ownership:~$ chown /hacker /flag
chown: invalid user: '/hacker'
hacker@permissions~changing-file-ownership:~$ chown hacker /flag
hacker@permissions~changing-file-ownership:~$ cat /flag
pwn.college{UFJtWsy82TMS-IGLJbc3NVqBpWs.QXxEjN0wCO2kjMzEzW}
hacker@permissions~changing-file-ownership:~$
```

🎉 Successfully completed **Changing File Ownership!** 🎉

Terminal

🚩 Vs.QXxEjN0wCO2kjMzEzW}

## • Groups and Files

```
hacker@permissions~groups-and-files:~$ chgrp hacker /flag
hacker@permissions~groups-and-files:~$ cat /flag
pwn.college{sWsyOljmPoMzqkeDb0xHNOVPAGj.QXxcjM1wCO2kjMzEzW}
hacker@permissions~groups-and-files:~$
```

Terminal

🚩 Flag

```
hacker@permissions~groups-and-files:~$ chgrp hacker /flag
hacker@permissions~groups-and-files:~$ cat /flag
pwn.college{shsy0ljmPoMzqkeDb0xt#QOVPAgj_QXxcjM1wC02kjMzEzW}
hacker@permissions~groups-and-files:~$
```

🎉 Successfully completed **Groups and Files!** 🎉

Terminal | {Gj.QXxcjM1wC02kjMzEzW}

- **Fun with Group Names**

```
hacker@permissions~fun-with-groups-names:~$ chgrp hacker/zardus /flag
chgrp: invalid group: 'hacker/zardus'
hacker@permissions~fun-with-groups-names:~$ chgrp zardus/hacker /flag
chgrp: invalid group: 'zardus/hacker'
hacker@permissions~fun-with-groups-names:~$ chgrp zardus /flag
chgrp: invalid group: 'zardus'
hacker@permissions~fun-with-groups-names:~$ id -gn
grp3369
hacker@permissions~fun-with-groups-names:~$ chgrp grp3369 /flag
hacker@permissions~fun-with-groups-names:~$ cat /flag
pwn.college{wPSooysRj3-yXQxY13wY8zFonKb.QXycjM1wC02kjMzEzW}
hacker@permissions~fun-with-groups-names:~$
```

Terminal | Flag

```
hacker@permissions~fun-with-groups-names:~$ chgrp hacker/zardus /flag
chgrp: invalid group: 'hacker/zardus'
hacker@permissions~fun-with-groups-names:~$ chgrp zardus/hacker /flag
chgrp: invalid group: 'zardus/hacker'
hacker@permissions~fun-with-groups-names:~$ chgrp zardus /flag
chgrp: invalid group: 'zardus'
hacker@permissions~fun-with-groups-names:~$ id -gn
grp3369
hacker@permissions~fun-with-groups-names:~$ chgrp grp3369 /flag
hacker@permissions~fun-with-groups-names:~$ cat /flag
pwn.college{wPSooysRj3-yXQxYl3wY8zFonKb.QXycjM1wC02k}MzEzW}
hacker@permissions~fun-with-groups-names:~$
```

🎉 Successfully completed Fun With Groups Names! 🎉

Terminal **<b.QXycjM1wC02k}MzEzW}**

- **Changing Permissions**

```
hacker@permissions~changing-permissions:~$ chmod a+r /flag
hacker@permissions~changing-permissions:~$ cat /flag
pwn.college{gggEZwrgL59esPVNr2fKe111rwU.QXzcjM1wC02k}MzEzW}
hacker@permissions~changing-permissions:~$
```

Terminal **Flag**

```
hacker@permissions~changing-permissions:~$ chmod a+r /flag
hacker@permissions~changing-permissions:~$ cat /flag
pwn.college{gggEZwrgL59esPVNr2fKe11lrwU.QXzcjM1wC02kjMzEzW}
hacker@permissions~changing-permissions:~$
```

🎉 Successfully completed **Changing Permissions!** 🎉

Terminal

U.QXzcjM1wC02kjMzEzW}

- **Executable Files**

```
hacker@permissions~executable-files:~$ ls -l /challenge/run
-r--r--r-- 1 hacker hacker 32 Jan 14 2025 /challenge/run
hacker@permissions~executable-files:~$ chmod o+x /challenge/run
hacker@permissions~executable-files:~$ /challenge/run
bash: /challenge/run: Permission denied
hacker@permissions~executable-files:~$ chmod u+x /challenge/run
hacker@permissions~executable-files:~$ ls -l /challenge/run
-r-xr--r-x 1 hacker hacker 32 Jan 14 2025 /challenge/run
hacker@permissions~executable-files:~$ /challenge/run
Successful execution! Here is your flag:
pwn.college{IbLHIDuDoXI5eUdG2ixMECnTS5D.QXyEjN0wC02kjMzEzW}
hacker@permissions~executable-files:~$
```

Terminal

Flag

```

hacker@permissions-executable-files:~$ ls -l /challenge/run
-r--r--r-- 1 hacker hacker 32 Jan 14 2025 /challenge/run
hacker@permissions-executable-files:~$ chmod o+x /challenge/run
hacker@permissions-executable-files:~$ /challenge/run
bash: /challenge/run: Permission denied
hacker@permissions-executable-files:~$ chmod u+x /challenge/run
hacker@permissions-executable-files:~$ ls -l /challenge/run
-r-xr--r-x 1 hacker hacker 32 Jan 14 2025 /challenge/run
hacker@permissions-executable-files:~$ /challenge/run
Successful execution! Here is your flag:
pwn.college{IbLHIDuDoXI5eUd62ixMECnTS5D.QXyEjN0wC02kjMzEzW}
hacker@permissions-executable-files:~$

```

🎉 Successfully completed **Executable Files!** 🎉

Terminal

D.QXyEjN0wC02kjMzEzW}

## ● Permission Tweaking Practice

```

hacker@permissions-permission-tweaking-practice:~$ /challenge/run
Round 1 of 8!

Current permissions of "/challenge/pwn": rw-r--r--
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": rw-r-xr-x
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
* the world does have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod 655 /challenge/pwn
You set the correct permissions!
Round 2 of 8!

Current permissions of "/challenge/pwn": rw-r-xr-x
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions

```

Terminal

Flag

```
hacker@permissions-permission-tweaking-practice:~$ chmod 655 /challenge/pwn/
You set the correct permissions!
Round 2 of 8!

Current permissions of "/challenge/pwn/": rw-r-xr-x
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
* the world does have execute permissions

Needed permissions of "/challenge/pwn/": rw-----
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod 600 /challenge/pwn/
You set the correct permissions!
Round 3 of 8!

Current permissions of "/challenge/pwn/": rw-----
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
```

```
hacker@permissions-permission-tweaking-practice:~$ chmod 600 /challenge/pwn
You set the correct permissions!
Round 3 of 8!

Current permissions of "/challenge/pwn": rw-----
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": rw-rwx---
* the user does have read permissions
* the user does have write permissions
* the user doesn't have execute permissions
* the group does have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

hacker@permissions-permission-tweaking-practice:~$ chmod 670 /challenge/pwn
You set the correct permissions!
Round 4 of 8!

Current permissions of "/challenge/pwn": rw-rwx---
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
```

```
hacker@permissions-permission-tweaking-practice:~$ chmod 670 /challenge/pwn
You set the correct permissions!
Round 4 of 8!

Current permissions of "/challenge/pwn": rw-rwx---
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": -w-rwx---
- the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

hacker@permissions-permission-tweaking-practice:~$ chmod 270 /challenge/pwn
You set the correct permissions!
Round 5 of 8!

Current permissions of "/challenge/pwn": -w-rwx---
- the user doesn't have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
```





```
hacker@permissions-permission-tweaking-practice:~$ chmod 620 /challenge/pwn
You set the correct permissions!
Round 8 of 8!

Current permissions of "/challenge/pwn": ---w----
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": r-x-w----
* the user does have read permissions
- the user doesn't have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod 520 /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions
```

Terminal Flag

```
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": r-x-w----
* the user does have read permissions
- the user doesn't have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod 520 /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod u+r /flag
hacker@permissions-permission-tweaking-practice:~$ cat /flag
pwn.college{cC53EttYd1lo8xoWPR6L5kFN_wx.QXwEjN6wCO2k}MzEzW}
hacker@permissions-permission-tweaking-practice:~$
```

Terminal Flag

```
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": r-x-w----
* the user does have read permissions
- the user doesn't have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod 520 /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permission-tweaking-practice:~$ chmod u+r /flag
hacker@permissions-permission-tweaking-practice:~$ cat /flag
pwn.college{cC53EttYd1lo8xoWPR6L5kFN_wx.QXwEjN6wCO2k}MzEzW}
hacker@permissions-permission-tweaking-practice:~$
```

Successfully completed Permission Tweaking Practice! 🎉

Terminal x.QXwEjN0wCO2k}MzEzW}

## • Permissions Setting Practice

```
hacker@permissions-permissions-setting-practice:~$ /challenge/run
Round 1 of 8!
```

```
Current permissions of "/challenge/pwn": rw-r--r--
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
```

```
Needed permissions of "/challenge/pwn": rw--w-r--
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
```

```
hacker@permissions-permissions-setting-practice:~$ chmod g=w /challenge/pwn
You set the correct permissions!
Round 2 of 8!
```

```
Current permissions of "/challenge/pwn": rw--w-r--
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
```

Terminal Flag

```
hacker@permissions-permissions-setting-practice:~$ chmod g=w /challenge/pwn
You set the correct permissions!
Round 2 of 8!
```

```
Current permissions of "/challenge/pwn": rw--w-r--
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
```

```
Needed permissions of "/challenge/pwn": r--r---w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
- the world doesn't have execute permissions
```

```
hacker@permissions-permissions-setting-practice:~$ chmod u-w,g+r-w,o-r+w /challenge/pwn
You set the correct permissions!
Round 3 of 8!
```

```
Current permissions of "/challenge/pwn": r--r---w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
```

Terminal Flag

```
hacker@permissions-permissions-setting-practice:~$ chmod u-w,g+r-w,o-r+w /challenge/pwn
You set the correct permissions!
Round 3 of 8!
```

```
Current permissions of "/challenge/pwn": r--r---w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
* the group does have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
* the world doesn't have read permissions
* the world does have write permissions
- the world doesn't have execute permissions
```

```
Needed permissions of "/challenge/pwn": rwx-wxr-x
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
* the world does have execute permissions
```

```
hacker@permissions-permissions-setting-practice:~$ chmod u+wx,g=wx,o=rx /challenge/pwn
You set the correct permissions!
Round 4 of 8!
```

```
Current permissions of "/challenge/pwn": rwx-wxr-x
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions
```

Terminal Flag

```

hacker@permissions-permissions-setting-practice:~$ chmod u+wx,g=wx,o=rx /challenge/pwn
You set the correct permissions!
Round 4 of 8!

Current permissions of "/challenge/pwn": rwx-wxr-x
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
* the world does have execute permissions

Needed permissions of "/challenge/pwn": r---wxr--
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u-wx,o-x /challenge/pwn
You set the correct permissions!
Round 5 of 8!

Current permissions of "/challenge/pwn": r---wxr--
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions

```

Terminal Flag

```

hacker@permissions-permissions-setting-practice:~$ chmod u-wx,o-x /challenge/pwn
You set the correct permissions!
Round 5 of 8!

Current permissions of "/challenge/pwn": r---wxr--
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
* the world does have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": r---wx-w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod o=w /challenge/pwn
You set the correct permissions!
Round 6 of 8!

Current permissions of "/challenge/pwn": r---wx-w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions

```

Terminal Flag

```

hacker@permissions-permissions-setting-practice:~$ chmod o=w /challenge/pwn
You set the correct permissions!
Round 6 of 8!

Current permissions of "/challenge/pwn": r---wx-w-
* the user does have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": rw--w-rw-
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
* the world does have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u+w,g-x,o+r /challenge/pwn
You set the correct permissions!
Round 7 of 8!

Current permissions of "/challenge/pwn": rw--w-rw-
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions

```

Terminal Flag

```

hacker@permissions-permissions-setting-practice:~$ chmod u+w,g-x,o+r /challenge/pwn
You set the correct permissions!
Round 7 of 8!

Current permissions of "/challenge/pwn": rw--w-rw-
* the user does have read permissions
* the user does have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
- the group doesn't have execute permissions
* the world does have read permissions
* the world does have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": rwx-----
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u+x,go= /challenge/pwn
You set the correct permissions!
Round 8 of 8!

Current permissions of "/challenge/pwn": rwx-----
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions

```

Terminal Flag

```

hacker@permissions-permissions-setting-practice:~$ chmod u+x,go= /challenge/pwn
You set the correct permissions!
Round 8 of 8!

Current permissions of "/challenge/pwn": rwx-----
* the user does have read permissions
* the user does have write permissions
* the user does have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": ---wx-wx
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
* the world does have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u-rwx,g=wx,o=wx /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions

```

Terminal Flag

```

- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": ---wx-wx
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
* the world does have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u-rwx,g=wx,o=wx /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u+r /flag
hacker@permissions-permissions-setting-practice:~$ cat /flag
pwn.college{IdcqFEQqCtAHoSNS_AVL80RN5KM.QXzET00wC02k}MzEZw}
hacker@permissions-permissions-setting-practice:~$

```

Terminal Flag

```

- the world doesn't have write permissions
- the world doesn't have execute permissions

Needed permissions of "/challenge/pwn": ---wx-wx
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
* the group does have write permissions
* the group does have execute permissions
- the world doesn't have read permissions
* the world does have write permissions
* the world does have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u-rwx,g=wx,o=wx /challenge/pwn
You set the correct permissions!
You've solved all 8 rounds! I have changed the ownership
of the /flag file so that you can 'chmod' it. You won't be able to read
it until you make it readable with chmod!

Current permissions of "/flag": -----
- the user doesn't have read permissions
- the user doesn't have write permissions
- the user doesn't have execute permissions
- the group doesn't have read permissions
- the group doesn't have write permissions
- the group doesn't have execute permissions
- the world doesn't have read permissions
- the world doesn't have write permissions
- the world doesn't have execute permissions
hacker@permissions-permissions-setting-practice:~$ chmod u+rwx,g=rwx,o=rwx /flag
hacker@permissions-permissions-setting-practice:~$ cat /flag
pwn.college{IdcqFEGQcTAHoSNS_AYLBORN5KM.QXzET00wC02kjMzEzW}
hacker@permissions-permissions-setting-practice:~$

```

🎉 Successfully completed Permissions Setting Practice! 🎉

## • The SUID Bit

```

hacker@permissions~the-suid-bit:~$ ls -l /challenge/getroot
-rwxr-xr-x 1 root root 155 Jan 14 2025 /challenge/getroot
hacker@permissions~the-suid-bit:~$ chmod u+s /challenge/getroot
hacker@permissions~the-suid-bit:~$ cat /flag
cat: /flag: Permission denied
hacker@permissions~the-suid-bit:~$ /challenge/getroot
SUCCESS! You have set the suid bit on this program, and it is running as root!
Here is your shell...
root@permissions~the-suid-bit:~# cat /flag
pwn.college{4RonCPA2fMMDG6Ftz6nQPcyj85r.QXzEjN0wC02kjMzEzW}
root@permissions~the-suid-bit:~#

```

```
hacker@permissions~the-suid-bit:~$ ls -l /challenge/getroot
-rwxr-xr-x 1 root root 155 Jan 14 2025 /challenge/getroot
hacker@permissions~the-suid-bit:~$ chmod u+s /challenge/getroot
hacker@permissions~the-suid-bit:~$ cat /flag
cat: /flag: Permission denied
hacker@permissions~the-suid-bit:~$ /challenge/getroot
SUCCESS! You have set the suid bit on this program, and it is running as root!
Here is your shell...
root@permissions~the-suid-bit:~# cat /flag
pwn.college{4RonCPA2fMMD6ZFtz6nQPcyj85r.QXzEjN0wC02kjMzEzW}
root@permissions~the-suid-bit:~#
```

🎉 Successfully completed **The SUID Bit!** 🎉

Terminal

5r.QXzEjN0wC02kjMzEzW}

