

Lab 8 | File Permission

Question 1: Using Symbolic Notation

Ans:

```
abd007@cis240-fall21: ~/lab8/question1
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrwxr-x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod g=rw,o=r directory/
abd007@cis240-fall21:~/lab8/question1$ ls -l
ls-l: command not found
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod u=rw,g=r-x,o=-r img.png
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r----- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod u=rw,g=rx,o=r img.png
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r-xr-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod u=rw,g=rx,o=r img.png
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r-xr-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod g=rx,o= img.png
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r----- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$
```

```
abd007@cis240-fall21: ~/lab8/question1
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod o= program.py/
chmod: cannot access 'program.py/': Not a directory
abd007@cis240-fall21:~/lab8/question1$ chmod o= program.py
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw--- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$ chmod u=rwx,g=rwx file.txt
abd007@cis240-fall21:~/lab8/question1$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rwxrwxr-- 1 abd007 abd007 148 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw--- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question1$
```

Question 2: Using Numeric Notation

Ans:

```
abd007@cis240-fall21: ~/lab8/question2
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$ chmod 764 directory/
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$ chmod 5 img.png
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-----r-x 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$ chmod 650 img.png
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw---- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$ chmod 660 program.py
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw---- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$ chmod 774
chmod: missing operand after '774'
Try 'chmod --help' for more information.
abd007@cis240-fall21:~/lab8/question2$ chmod 774 file.txt
abd007@cis240-fall21:~/lab8/question2$ ls -l
total 256
drwxrw-r-- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rwxrwxr-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-r-x--- 1 abd007 abd007 246609 Dec 14 14:07 img.png
-rw-rw---- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question2$
```

Question 3: Using Numeric Notation

Ans:

```
abd007@cis240-fall21: ~/lab8/question3
abd007@cis240-fall21:~/lab8/question2$ cd ../question3
abd007@cis240-fall21:~/lab8/question3$ ls -l
total 256
drwxrwxr-x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246610 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question3$ chmod 561 directory/
abd007@cis240-fall21:~/lab8/question3$ ls -l
total 256
dr-xrw---x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246610 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question3$ chmod 777 img.png
abd007@cis240-fall21:~/lab8/question3$ ls -l
total 256
dr-xrw---x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rwxrwxrwx 1 abd007 abd007 246610 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question3$ chmod 756 program.py
abd007@cis240-fall21:~/lab8/question3$ ls -l
total 256
dr-xrw---x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rwxrwxrwx 1 abd007 abd007 246610 Dec 14 14:07 img.png
-rwxr-xrw- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question3$ chmod 560 file.txt
abd007@cis240-fall21:~/lab8/question3$ ls -l
total 256
dr-xrw---x 2 abd007 abd007 4096 Dec 14 14:07 directory
-r-xrw--- 1 abd007 abd007 160 Dec 14 14:07 file.txt
-rwxrwxrwx 1 abd007 abd007 246610 Dec 14 14:07 img.png
-rwxr-xrw- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question3$
```

Question 4: Using Symbolic Notation

Ans:

```
abd007@cis240-fall21: ~/lab8/question4
abd007@cis240-fall21:~/lab8/question4$ ls -l
total 256
drwxrwxr-x 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 246 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question4$ chmod u=x,g=wx,o=rw directory/
abd007@cis240-fall21:~/lab8/question4$ ls -l
total 256
d--x-wxrw- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 246 Dec 14 14:07 file.txt
-rw-rw-r-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question4$ chmod u=rwx,g=rx,o= img.png
abd007@cis240-fall21:~/lab8/question4$ ls -l
total 256
d--x-wxrw- 2 abd007 abd007 4096 Dec 14 14:07 directory
-rw-rw-r-- 1 abd007 abd007 246 Dec 14 14:07 file.txt
-rwxr-x-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
-rw-rw-r-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question4$ chmod u=w,g=x,o=r program.py
abd007@cis240-fall21:~/lab8/question4$ chmod u=rx,o=wx file.txt
abd007@cis240-fall21:~/lab8/question4$ ls -l
total 256
d--x-wxrw- 2 abd007 abd007 4096 Dec 14 14:07 directory
-r-xrw--wx 1 abd007 abd007 246 Dec 14 14:07 file.txt
-rwxr-x-- 1 abd007 abd007 246608 Dec 14 14:07 img.png
--w---xr-- 1 abd007 abd007 21 Dec 14 14:07 program.py
abd007@cis240-fall21:~/lab8/question4$
```