

# Using umask (Lab) | Coursera

[coursera.org/learn/linux-tools-for-developers/supplement/FOlEo/using-umask-lab](https://coursera.org/learn/linux-tools-for-developers/supplement/FOlEo/using-umask-lab)

## Exercise

Create an empty file with:

```
$ touch afile
```

```
$ ls -l afile
```

```
-rw-rw-r-- 1 coop coop 0 Jul 26 12:43 afile
```

which shows it is created by default with read/write permissions for owner and group, and read for world.

In fact, the default permissions given when creating a file is actually read/write for owner, group and world (0666); it has been modified by the current **umask**.

If you just type **umask** you get the current value:

```
$ umask
```

```
0002
```

which is the most conventional value set by system administrators for users. This value is combined with the file creation permissions to get the actual result; i.e.:

```
0666 & ~002 = 0664; i.e., rw-rw-r--
```

Try modifying the **umask** and creating new files and see the resulting permissions as in:

```
$ umask 0022
```

```
$ touch afile2
```

```
$ umask 0666
```

```
$ touch afile3
```

```
$ ls -l afile*
```

