

NAME

chmod — change mode of file

SYNOPSIS

chmod mode file ...

DESCRIPTION

The mode of each named *file* is changed according to *mode*, which may be absolute or symbolic. An absolute *mode* is an octal number constructed from the OR of the following modes:

4000	set user ID on execution
2000	set group ID on execution
1000	sticky bit, see <i>chmod(2)</i>
0400	read by owner
0200	write by owner
0100	execute (search in directory) by owner
0070	read, write, execute (search) by group
0007	read, write, execute (search) by others

A symbolic *mode* has the form:

[*who*] *op permission* [*op permission*]

The *who* part is a combination of the letters **u** (for user's permissions), **g** (group) and **o** (other). The letter **a** stands for **ugo**, the default if *who* is omitted.

Op can be **+** to add *permission* to the file's mode, **-** to take away *permission* and **=** to assign *permission* absolutely (all other bits will be reset).

Permission is any combination of the letters **r** (read), **w** (write), **x** (execute), **s** (set owner or group id) and **t** (save text — sticky). **U**, **g** or **o** indicate that *permission* is to be taken from the current mode. Omitting *permission* is only useful with **=** to take away all permissions.

Multiple symbolic modes separated by commas may be given. Operations are performed in the order specified. The letter **s** is only useful with **u** or **g** and **t** only works with **u**.

Only the owner of a file (or the super-user) may change its mode.

EXAMPLES

The first example denies write permission to others, the second makes a file executable:

```
chmod o-w file
```

```
chmod +x file
```

SEE ALSO

ls(1), chmod(2), umask(2)