

NAME

cut — extract bytes, characters, or fields

SYNOPSIS

```
cut -f range[,range]... [-Czs] [-d delimiter] [-O out-delimiter] [file]...
```

DESCRIPTION

Copies bytes, characters, or fields specified by *ranges* from each line of the input *files* (standard input stream if none or '-') to the standard output stream.

ranges can be separated by commas or spaces, and each can be in the format:

```
number {number}
from- [from, ∞)
from-to [number, to]
-to [1, to]
```

Indices are 1-based, and a union is taken of all *ranges*.

With **-b**, bytes are extracted; with **-n** characters are never interrupted mid-sequence, with rounding preferred down (see **EXAMPLES**).

The newline (NUL with **-z**) is never matched and always printed (unless the entire line was removed with **-fs**).

OPTIONS (ŁĆ łć)

-b, --bytes=range[,range]...	Extract bytes.
-n	Don't interrupt multi-byte character sequences.
-C, --complement	Invert <i>ranges</i> : select all <i>but</i> what they match ($[1, \infty) - \Sigma range$). For the purposes of -n , the most minimal set of <i>ranges</i> is constructed.

EXAMPLES

```
$ printf '\x01\x02\x03\x04\0\x05\x06\x07' | cut -zb 1,3- | hexdump -C
00000000  01 03 04 00 05 07 00                |.....|
00000007
```

```
$ printf '\n''\n''\n''\n' | cut -c 1,3-
```

```
# name, IDs, homedir, shell, ...
$ cut -f 1,3-4,6- -d: -O$(printf '\t') /etc/passwd
root    0      0      /root  /bin/bash
bin     2      2      /bin   /usr/sbin/nologin
irc     39     39     /var/run/ircd /usr/sbin/nologin
cicada  1000   100    /home/cicada /bin/bash
nobody  65534  65534  /nonexistent /usr/sbin/nologin
# Everything else: password and GNATS
$ cut -Cf 1,3-4,6- -d: -O$(printf '\t') /etc/passwd
x      root
x      bin
x      ircd
x      ŁĆ łć,,,
x      nobody
```