## NAME

**cut** — extract bytes, characters, or fields

## SYNOPSIS

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

## DESCRIPTION

Copies bytes, characters, or fieflds specified by *range*s from each line of the input *file*s ( standard input stream if none or '−' ) to the standard output stream.

*range*s 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 *range*s.

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 *range*s: select all *but* what they match ( [**1**, ∞) − Σ*range* ). For the purposes of **-n**, the most minimal set of *range*s 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 'яйцо\nЯЙЦО''яйцо\nЯЙЦО''яйцо\nЯЙЦО''яйцо\nЯЙЦО' | cut -c 1,3-
яцо
ЯЦО

# 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       ŁĄĘĆŻŹŃ łąęćżźń,,,
x       nobody
```