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 (ŁĄĘĆŻŹŃ łąęćżźń)

−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 '\n''\n''\n''\n' | cut −c 1,3−
```

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```
# 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
```