What is the cut command in UNIX?

* The cut command in UNIX is a command line utility for cutting sections from each line of files and writing the result to standard output.
* It can be used to cut parts of a line by byte position, character and delimiter.
* It can also be used to cut data from file formats like CSV.

**How to cut by byte position**

To cut out a section of a line by specifying a byte position use the -b option.

**echo 'baz' | cut -b 2**

**a**

**echo 'baz' | cut -b 1-2**

**ba**

**echo 'baz' | cut -b 1,3**

**bz**

**How to cut by character**

* To cut by character use the -c option. This selects the characters given to the -c option. This can be a list of comma separated numbers, a range of numbers or a single number.
* Where your input stream is character based -c can be a better option than selecting by bytes as often characters are more than one byte.
* In the following example character ‘♣’ is three bytes. By using the -c option the character can be correctly selected along with any other characters that are of interest.

**echo '♣foobar' | cut -c 1,6**

**♣a**

**echo '♣foobar' | cut -c 1-3**

**♣fo**

**How to cut based on a delimiter**

* To cut using a delimiter use the -d option.
* This is normally used in conjunction with the -f option to specify the field that should be cut.

John,Smith,34,London

Arthur,Evans,21,Newport

George,Jones,32,Truro

The delimiter can be set to a comma with -d ','. cut can then pull out the fields of interest with the -f flag. In the following example the first field is cut.

**cut -d ',' -f 1 names.csv**

**John**

**Arthur**

**George**

Multiple fields can be cut by passing a comma separated list.

**cut -d ',' -f 1,4 names.csv**

**John,London**

**Arthur,Newport**

**George,Truro**

**How to cut by complement pattern**

* To cut by complement us the --complement option.
* Note this option is not available on the BSD version of cut.
* The --complement option selects the *inverse* of the options passed to sort.
* In the following example the -c option is used to select the first character.
* Because the --complement option is also passed to cut the second and third characters are cut.

**echo 'foo' | cut --complement -c 1**

**oo**

**How to modify the output delimiter**

To modify the output delimiter use the --output-delimiter option.

Note that this option is not available on the BSD version of cut.

In the following example a semi-colon is converted to a space and the first, third and fourth fields are selected.

**echo 'how;now;brown;cow' | cut -d ';' -f 1,3,4 --output-delimiter=' '**

**how brown cow**