

Awk

awk

```
pattern {action}
```

```
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```

```
$ awk '{print $2}' /etc/fstab
```

to filter out comment lines - starting with #

```
$ awk '/^[^#]/ {print $2}' /etc/fstab
```

to grep on TWO occurrences (AND operator)

```
$ awk '/pattern1/ && /pattern2/' /var/log/messages
```

case insensitive

```
$ awk '/pattern1/ && /pattern2/' IGNORECASE=1 /var/log/messages
```

print first field from password file using field separator ':'

```
$ awk -F: '{print$1}' /etc/passwd
```

print only user ID > 500

```
$ awk -F: '$3>=500 {print$1}' /etc/passwd
```

display average of numbers entered on a line:

```
$ awk '{ sum=0; for (i=1; i<=NF; i++) sum += $i; print sum/NF; }'
```

NF	number of fields in the current line
NR	the current record number (line number)
FS	input field separator (space by default)
RS	record separator (newline by default)
Example	Example
Example	Example
Example	Example

Example	Example
Example	Example

show the 5th record on the second line:

```
df /tmp | awk 'NR==2 {print$5 }'
```

use awk with a program

the file **maxuid**:

```
BEGIN {maxuid = 0; FS=":" }
{ if ($3 > maxuid) maxuid = $3 }
END { print " the largest UID is ", maxuid }
```

then use awk like this:

```
$ awk -f maxuid /etc/passwd
```

to ignore user nobody:

```
BEGIN {maxuid = 0; FS=":" }
$1 != "nobody" { if ($3 > maxuid) maxuid = $3 }
END { print " the largest UID is ", maxuid }
```

cat -n: (adds line numbers)

```
$ awk '{ print NR, $0}' /etc/fstab
```

wc -w: (count words)

```
$ awk '{ w += NF } END { print w}' /etc/fstab
```

grep chris /etc/passwd:

```
$ awk '/^chris/' /etc/passwd
```

writing self contained scripts

```
#!/usr/bin/awk -f
{ cost[$1] += $2*$4 }
END { for (cat in cost) print cat, cost[cat] }
```

```
chmod u+x catscript
```

```
./catscript
```

<http://www.pement.org/awk/awk1line.txt>

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