

```
Ubuntu 14.04.6 LTS ubuntu tty1
ubuntu login: mufida
Password:
Last login: Tue Jan 13 17:50:28 WIB 2026 on ttym1
Welcome to Ubuntu 14.04.6 LTS (GNU/Linux 4.4.0-142-generic i686)

 * Documentation: https://help.ubuntu.com/

 System information as of Thu Jan 22 08:30:02 WIB 2026

 System load: 0.0           Memory usage: 1%   Processes:      87
 Usage of /: 4.7% of 22.27GB Swap usage: 0%   Users logged in: 0

 Graph this data and manage this system at:
     https://landscape.canonical.com/

41 packages can be updated.
32 updates are security updates.

Your Hardware Enablement Stack (HWE) is supported until April 2019.
mufida@ubuntu:~$ awk "BEGIN { print \"mufida\" }"
mufida
mufida@ubuntu:~$ awk '{print}'
hallo mufida
hallo mufida
mufida@ubuntu:~$
```

```
mufida@ubuntu:~$ nano program_
```

```
BEGIN { print "I wonder this a long program" }
```

[Wrote]

```
mufida@ubuntu:~$ awk -f program
```

```
mufida@ubuntu:~$ awk -f program
I wonder this a long program
mufida@ubuntu:~$
```

```
mufida@ubuntu:~$ awk -f program
I wonder this a long program
mufida@ubuntu:~$ nano program_
```

GNU nano 2.2.0

file: program

```
BEGIN { print "I wonder this a long program" }
#!/usr/bin/awk -f
BEGIN { print "I wonder this is a long program" }
```

```
muf ida@ubuntu:~$ chmod +x program
```

```
muf ida@ubuntu:~$ chmod +x program
muf ida@ubuntu:~$ ./program
```

```
muf ida@ubuntu:~$ chmod +x program
muf ida@ubuntu:~$ ./program
I wonder this is a long program
muf ida@ubuntu:~$
```

```
muf ida@ubuntu:~$ nano program
```

```
GNU nano 2.2.6                               File: program

#!/usr/bin/awk -f

# this program prints a nice friendly message.
# It helps keep novice user from miss understanding.

BEGIN { print "This program contains comments" }
```

```
muf ida@ubuntu:~$ chmod +x program
muf ida@ubuntu:~$ ./program
This program contains comments
muf ida@ubuntu:~$
```

```
muf ida@ubuntu:~$ chmod +x program
muf ida@ubuntu:~$ ./program
This program contains comments
muf ida@ubuntu:~$ awk '{ print "Hello" } # lets be cute'
= Hello
Hello
^O
Hello
muf ida@ubuntu:~$
```

```
muf ida@ubuntu:~$ awk "BEGIN { print \"Don't Panic\" }"
Don't Panic
muf ida@ubuntu:~$
```

```
mufida@ubuntu:~$ awk "BEGIN { print \"Don't Panic\" }"
Don't Panic
mufida@ubuntu:~$ awk 'BEGIN { print "Here is a single quote <''''>" }'
Here is a single quote <'>
mufida@ubuntu:~$ awk 'BEGIN { print "Here is a single quote <\' \'>" }'
awk: cmd. baris:1: BEGIN { print "Here is a single quote <'"
awk: cmd. baris:1:                                ^ string tidak terselesaikan
awk: cmd. baris:1: BEGIN { print "Here is a single quote <'"
awk: cmd. baris:1:                                ^ syntax error
mufida@ubuntu:~$
```

<

```
mufida@ubuntu:~$ awk "BEGIN { print <"Here is a single quote <'>\n">" }"
Here is a single quote <'>
mufida@ubuntu:~$ awk 'BEGIN { print "Here is a single quote <>47>" }'
Here is a single quote <'>
mufida@ubuntu:~$ awk 'BEGIN { print "Here is a double quote <>42>" }'
Here is a double quote <">
mufida@ubuntu:~$ awk -v sq="" 'BEGIN { print "Here is a single quote <" sq ">" }'
Here is a single quote <'>
mufida@ubuntu:~$
```

[Wrote 13 lines]

```
mufida@ubuntu:~$ awk '/foo/ { print $0 }' BBS-list
fooley 555-1234 2400/1200/300 B
foot 555-6699 1200/300 B
macfoo 555-6480 1200/300 A
sabafoo 555-2127 1200/300 C
mufida@ubuntu:~$
```

<

[Wrote 18 lines]

```
mufida@ubuntu:~$ awk '{ print $0 }' inventory-shipped
Jan 13 25 15 115
Feb 15 32 24 226
Mar 15 24 34 228
Apr 31 52 63 420
May 16 34 29 208
Jun 31 42 75 492
Jul 24 34 67 436
Aug 15 34 47 316
Sep 13 55 37 277
Oct 29 54 68 525
Nov 20 87 82 577
Dec 17 35 61 401

Jan 21 36 64 620
Feb 26 58 80 652
Mar 24 75 70 495
Apr 21 70 74 514
```

```
mufida@ubuntu:~$
```

```
mufida@ubuntu:~$ awk '/1Z/ { print $0 } /121/ { print $0 }' BBS-list inventory-shipped
aardvark 555-5553 1200/300 B
alpo-net 555-3412 2400/1200/300 A
barfly 555-7685 1200/300 A
bites 555-1675 2400/1200/300 A
core 555-2912 1200/300 C
fooley 555-1234 2400/1200/300 B
foot 555-6699 1200/300 B
macfoo 555-6480 1200/300 A
sdace 555-3430 2400/1200/300 A
sabafoo 555-2127 1200/300 C
mufida@ubuntu:~$ _
```

```
<
```

```
sabafoo 555-2127 1200/300 C
mufida@ubuntu:~$ ls -l
total 540
-rwxrwxr-x 1 mufida mufida 83 Jan 13 17:57 backup.sh
-rw-rw-r-- 1 mufida mufida 313 Jan 22 10:00 BBS-list
-rwxrwxr-x 1 mufida mufida 55 Jan 13 17:53 cloud.sh
-rw-rw-r-- 1 mufida mufida 29 Jan 22 09:35 data.txt
-rw-r--r-- 1 root root 525372 Jan 13 17:58 etc_backup.tar.gz
-rw-rw-r-- 1 mufida mufida 274 Jan 22 10:22 inventory-shipped
-rwxrwxr-x 1 mufida mufida 170 Jan 22 09:09 program
mufida@ubuntu:~$ ls -l | awk '$6 == "Nov" { sum += $5 } END {print "Total byte November:", sum }'
Total byte November:
mufida@ubuntu:~$
```

```
-rwxrwxr-x 1 mufida mufida 170 Jan 22 09:09 program
mufida@ubuntu:~$ ls -l | awk '$6 == "Nov" { sum += $5 } END {print "Total byte November:", sum }'
Total byte November:
mufida@ubuntu:~$ awk 'BEGIN {
> "HELLO, WORLD"
> }'
awk: cmd. baris:1: BEGIN {
awk: cmd. baris:1: ^ tidak terduga baris baru atau akhir dari string
mufida@ubuntu:~$ awk 'BEGIN {
> "HELLO, WORLD"
> }'
mufida@ubuntu:~$
```

```
mufida@ubuntu:~$ awk 'BEGIN {
> print \
> "hello, world"
> }'
hello, world
mufida@ubuntu:~$ nano data
```

```
GNU nano 2.2.6
```

```
This is first line
This is second line
This is third line
```

```
mufida@ubuntu:~$ awk '{ if (length($0) > max) max = length($0) } END { print max }' data
19
mufida@ubuntu:~$
```

```
mufida@ubuntu:~$ awk '{ if (length($0) > max) max = length($0) } END { print max }' data
19
mufida@ubuntu:~$ expand data | awk '{ if (x<length() ) x=length()} END { print "maximum line length
is " x )'
awk: cmd. baris:1: ( if (x<length() ) x=length()} END { print "maximum line length is " x )
awk: cmd. baris:1: ^ syntax error
awk: cmd. baris:1: ( if (x<length() ) x=length()} END { print "maximum line length is " x )
awk: cmd. baris:1: ^ syntax error
awk: cmd. baris:1: ( if (x<length() ) x=length()} END { print "maximum line length is " x )
awk: cmd. baris:1: ^ syntax error
awk: cmd. baris:2: ( if (x<length() ) x=length()} END { print "maximum line length is " x )^ tidak t
erduga baris baru atau akhir dari string
mufida@ubuntu:~$ expand data | awk '{ if (x < length()) x=length () } END { print "maximum line leng
th is " x )'
maximum line length is 19
mufida@ubuntu:~$ awk 'NF > 0' data
This is first line
This is second line
This is third line
mufida@ubuntu:~$ _
```

```
maximum line length is 19
mufida@ubuntu:~$ awk 'NF > 0' data
This is first line
This is second line
This is third line
mufida@ubuntu:~$ awk 'BEGIN { for (i = 1; i <= 7; i++) print int (101 * rand ()) }'
```

```
24
29
85
15
59
19
81
mufida@ubuntu:~$ _
```

```
01
mufida@ubuntu:~$ ls -l | awk '{ x += $5 } END { print "total bytes: " x }'
total bytes: 526354
mufida@ubuntu:~$ _
```

```
mufida@ubuntu:~$ ls -l | awk '{ x += $5 } END { print "total bytes: " x }'
total bytes: 526354
mufida@ubuntu:~$ ls -l | awk '{ x += $5 } END { print "total K-bytes: " x/1024b }'
total K-bytes: 514.018
mufida@ubuntu:~$ awk -f '{ print $1 }' /etc/passwd
awk: fatal: tidak dapat membuka berkas sumber '{ print $1 }' untuk pembacaan (Tidak ada berkas atau
direktori seperti itu)
mufida@ubuntu:~$ awk -F: '{ print $1 }' /etc/passwd | sort
backup
bin
daemon
games
gnats
irc
landscape
libuuid
list
lp
mail
man
messagebus
mufida
news
nobody
proxy
root
sync
sys
syslog
uucp
www-data
mufida@ubuntu:~$ _
```

```
muf ida@ubuntu:~$ awk 'END { print NR }' data
3
muf ida@ubuntu:~$ awk 'NR % 2 == 0' data
This is second line
muf ida@ubuntu:~$ awk '/12/ { print $0 }
> /21/ { print $0 }' BBS-list inventory-shipped
aardvark 555-5553 1200/300 B
alpo-net 555-3412 2400/1200/300 A
barfly 555-7685 1200/300 A
bites 555-1675 2400/1200/300 A
core 555-2912 1200/300 C
fooey 555-1234 2400/1200/300 B
foot 555-6699 1200/300 B
macfoo 555-6480 1200/300 A
sdace 555-3430 2400/1200/300 A
sabafoo 555-2127 1200/300 C
sabafoo 555-2127 1200/300 C
Jan 21 36 64 620
Apr 21 70 74 514
muf ida@ubuntu:~$ _
```

```
muf ida@ubuntu:~$ ls -l
sdace 555-3430 2400/1200/300 A
sabafoo 555-2127 1200/300 C
sabafoo 555-2127 1200/300 C
Jan 21 36 64 620
Apr 21 70 74 514
muf ida@ubuntu:~$ ls -l
total 544
-rwxrwxr-x 1 muf ida muf ida    83 Jan 13 17:57 backup.sh
-rw-rw-r-- 1 muf ida muf ida   313 Jan 22 10:00 BBS-list
-rwxrwxr-x 1 muf ida muf ida    55 Jan 13 17:53 cloud.sh
-rw-rw-r-- 1 muf ida muf ida   58 Jan 22 10:52 data
-rw-rw-r-- 1 muf ida muf ida   29 Jan 22 09:35 data.txt
-rw-r--r-- 1 root   root   525372 Jan 13 17:58 etc_backup.tar.gz
-rw-rw-r-- 1 muf ida muf ida   274 Jan 22 10:22 inventory-shipped
-rwxrwxr-x 1 muf ida muf ida   170 Jan 22 09:09 program
muf ida@ubuntu:~$ LC_ALL = C ls -l | awk '$6 == "Nov" { sum += $5 } END { print sum }'
LC_ALL: perintah tidak ditemukan

muf ida@ubuntu:~$ awk '/12/ { print $0 }
> /21/ { print $0 }' BBS-list inventory-shipped
aardvark 555-5553 1200/300 B
alpo-net 555-3412 2400/1200/300 A
barfly 555-7685 1200/300 A
bites 555-1675 2400/1200/300 A
core 555-2912 1200/300 C
fooey 555-1234 2400/1200/300 B
foot 555-6699 1200/300 B
macfoo 555-6480 1200/300 A
sdace 555-3430 2400/1200/300 A
sabafoo 555-2127 1200/300 C
sabafoo 555-2127 1200/300 C
Jan 21 36 64 620
Apr 21 70 74 514
muf ida@ubuntu:~$ awk '/This regular expression is too long, so continue it\n on the next line/ { $1 }'
muf ida@ubuntu:~$
```