

Pengenalan dan Dasar-Dasar Pemrograman AWK sebagai Text-Processing Language

```
ubuntu login: lia
Password:
Last login: Thu Jan 15 14:05:55 WIB 2026 on ttym
Welcome to Ubuntu 14.04.6 LTS (GNU/Linux 4.4.0-148-generic i686)

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

 System information as of Thu Jan 22 08:27:36 WIB 2026

System load: 0.08      Memory usage: 1%   Processes:     87
Usage of /: 9.9% of 22.27GB  Swap usage: 0%   Users logged in: 0

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

UA Infrastructure Extended Security Maintenance (ESM) is not enabled.

0 updates can be installed immediately.
0 of these updates are security updates.

Enable UA Infrastructure ESM to receive 207 additional security updates.
See https://ubuntu.com/advantage or run: sudo ua status

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

hallo ini tes_
```

```
Password:  
Last login: Thu Jan 15 14:05:55 WIB 2026 on tty1  
Welcome to Ubuntu 14.04.6 LTS (GNU/Linux 4.4.0-148-generic i686)  
  
* Documentation: https://help.ubuntu.com/  
  
System information as of Thu Jan 22 08:27:36 WIB 2026  
  
System load: 0.08           Memory usage: 1%   Processes:      87  
Usage of /: 9.9% of 22.27GB  Swap usage:  0%   Users logged in: 0  
  
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Enable UA Infrastructure ESM to receive 207 additional security updates.  
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Your Hardware Enablement Stack (HWE) is supported until April 2019.  
lia@ubuntu:~$ awk "BEGIN { print \"Konnichiwa\" }"  
Konnichiwa  
lia@ubuntu:~$ awk '{print }'  
  
hallo ini tes  
hallo ini tes  
lia@ubuntu:~$ _
```

lia@ubuntu:~\$ nano program_

```
GNU nano 2.2.6          File: program                         Modified
BEGIN { print "I wonder this is a long program" }_
^G Bantuan      ^O Tulis      ^R Baca File      ^Y Hlm sebelumnya^K Ptng Teks      ^C Pos Kursor
^X Keluar      ^J Justifikasi  ^W Di mana      ^U Hlm berikutnya^U UnCut Text    ^T Mengeja
```

```
GNU nano 2.2.6          File: program

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

[ Wrote 2 lines ]

lia@ubuntu:~$
```

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

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

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

[Wrote 3 lines]

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

[Wrote 3 lines]

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

```
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" }

[ Wrote 7 lines ]
```

```
lia@ubuntu:~$ chmod +x program
lia@ubuntu:~$ ./program
This program contains comments
lia@ubuntu:~$ _
```

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

```
lia@ubuntu:~$ chmod +x program
lia@ubuntu:~$ ./program
This program contains comments
lia@ubuntu:~$ awk '{ print "Hello" } # lets be cute'
=Hello
Hello
lia@ubuntu:~$ awk "BEGIN { print \"Don't Panic\" }"
Don't Panic
lia@ubuntu:~$ _
```

```
I wrote 7 lines ]
```

```
lia@ubuntu:~$ chmod +x program
lia@ubuntu:~$ ./program
This program contains comments
lia@ubuntu:~$ awk '{ print "Hello" } # lets be cute'
=Hello
Hello
lia@ubuntu:~$ awk "BEGIN { print \"Don't Panic\" }"
Don't Panic
lia@ubuntu:~$ awk 'BEGIN { print "Here is a single quote <\u0027>" }'
Here is a single quote <'
lia@ubuntu:~$ awk -v sq="" 'BEGIN { print "Here is a single quote <" sq ">" }'
Here is a single quote <'>
```

```
lia@ubuntu:~$ awk 'BEGIN { print "Here is a double quote <\u0022>" }'
Here is a double quote <"
lia@ubuntu:~$ _
```

```
lia@ubuntu:~$ awk 'BEGIN { print "Here is a double quote <\u0022>" }'
Here is a double quote <"
lia@ubuntu:~$ awk -v sq="" 'BEGIN { print "Here is a single qoute <" sq ">" }'
Here is a single qoute <'>
lia@ubuntu:~$ _
```

```
lia@ubuntu:~$ awk 'BEGIN { print "Here is a double quote <\u0022>" }'
Here is a double quote <"
lia@ubuntu:~$ awk -v sq="" 'BEGIN { print "Here is a single qoute <" sq ">" }'
Here is a single qoute <'>
lia@ubuntu:~$ awk '{ print }'
Now is the time for all good men
Now is the time for all good men
to come to the aid of their country
to come to the aid of their country
four score and seven years ago, ...
four score and seven years ago, ...
What, me worry?
What, me worry?
tets
tets
eee
eee
politeknik purbaya
politeknik purbaya
```

```
lia@ubuntu:~$ awk '{ print }'  
Now is the time for all good men  
Now is the time for all good men  
to come to the aid of their country  
to come to the aid of their country  
four score and seven years ago, ...  
four score and seven years ago, ...  
What, me worry?  
What, me worry?  
tets  
tets  
eee  
eee  
politeknik purbaya  
politeknik purbaya  
TEKNIK INFORMATIKA  
TEKNIK INFORMATIKA  
-
```

Kesimpulan Praktikum : Berkenalan dengan "AWK"

Definisi dan Karakteristik: AWK adalah bahasa pemrograman yang dirancang khusus sebagai alat penyaring (filter) dan manipulasi file teks yang sangat efisien dalam lingkungan UNIX/Linux.

Fungsi Utama: Bahasa ini sangat efektif digunakan untuk mengelola database sederhana, membuat laporan, memvalidasi data, serta memecah bagian data untuk proses pengurutan atau komunikasi jaringan.

Mekanisme Kerja: Fungsi dasar AWK adalah mencari pola tertentu pada setiap baris teks. Jika suatu baris sesuai dengan pola yang ditentukan, maka AWK akan menjalankan instruksi atau tindakan (action) yang spesifik terhadap baris tersebut.

Struktur Perintah: Perintah AWK secara umum terdiri dari pola dan tindakan yang diapit oleh kurung kurawal, dengan format: awk 'pola { tindakan }' nama_file.

Fleksibilitas Pengutipan: AWK menyediakan berbagai cara untuk menangani penggunaan tanda kutip (tunggal maupun ganda) melalui penggabungan quoted string, penggunaan backslash escape, atau penggunaan octal escape sequence agar karakter khusus dapat ditampilkan dengan benar sebagai output.

Standarisasi: Sebagai bagian dari utility standar POSIX 1003.2, AWK menjamin portabilitas dan kecepatan dalam pemrosesan teks dibandingkan dengan skrip shell biasa untuk manipulasi data yang kompleks.

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