

Chapter 4

Actions

Overview

- ▣ Simple actions
- ▣ Flow Control
- ▣ awk Reserved Variables

Lesson: Simple actions

- ▣ Expressions
- ▣ Variables
- ▣ Operations

User-Defined Variables

- Variables can be declared on the command line or in the awk program.

```
$ awk -v var=value '{program}'
$ awk '{program}'
$ awk '{program}' [file | var=value] ...
```

```
...
var = "word"
...
var=number
...
var = var + 3
...
var = "word1 word2 word3"
...
print var
```

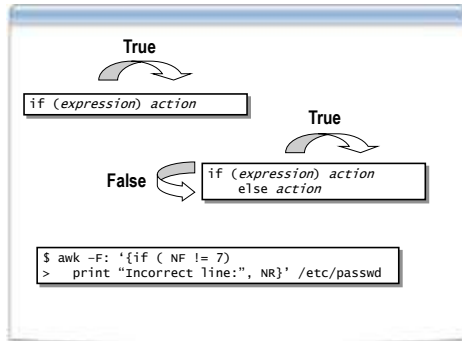
Operations

Operation	Operators
Add, subtract, multiply, divide, remainder	+ - * / %
Exponentiation	^
Increment, decrement	++ --
Assignment	= += -= *= /= %= ^=
Grouping	()
Relational	< <= > >= != ==
Logical	&& !
Conditional	?:
Matching	~ !~
Array membership	in
Field reference	\$

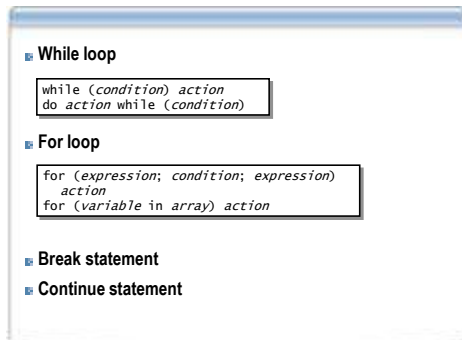
Lesson: Flow Control

- Conditional statements
- Loops
- next and exit

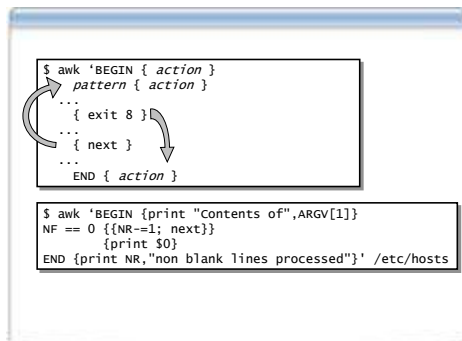
Conditional if



Loops



next and exit




Lesson: awk Reserved Variables

- awk has a number of reserved variables.

- The reserved variables all have UPPERCASE names:


Variable	Description	Default
FS	Input field separator	Space or Tab or ERE from -F
OFS	Output field separator	Space
RS	Input record separator	Newline
ORS	Output record separator	Newline
NF	Number of input fields in current record	
NR	Number of current input record	
FILENAME	Name of current input file	
OFMT	Output format for numbers	%.6g

Review Exercises



- Complete the exercises from the Learning Guide

Topics for Review



- 1 Read the review topics
- 2 Think about what you learned in this Session in the context of your own work environment
- 3 Discuss your answers as a class
